

1 GGACACTGAC ATGGACTGAA GGAGTAGAAA GCTGGAGTGA CACTGCAGTG
 51 GGCTTCTCCG TAGCCCCAGC CTTCAGGCTG CGCAGCCCCT AACCTGCCCG
 101 CACCGCTTTT GGAAGCAGC TTGGCTCTTC CATCTCCCA AGCCTTCCTC
 151 TCCATCCCTT CATCCACCC TCGCCGATCT TACTTTTCT TTTACCCACG
 201 GGGCCGCGC CGGCCACCC ETGGCCGGTG CAAACACCCA AGCCCTCTCC
 251 AGTTCTCCTT CAAGCTAATA TTTTCCCACC TGTCTTTTC TGGGGTTCCT
 301 CCACGAGCCA GTCCAAGGCT CCCCATCCT CGGAAATTGT TTTGTTGGAC
 351 TGCTAAACCG AGGCGTGTA AGCTTGAGGA CTTTATTATT ATTTGGGTTC
 401 TTTTCATTTC TTCCCCCTCT GGGCAACGAA GCAATGAAAT TTCCAATCGA
 451 GACGCCAAGA AACAGGTGA ACTGGGATCC TAAAGTGGCC GTTCCCGCAG
 501 CAGCACCGGT GTGCCAGCCC AAGAGCGCCA CTAACGGGCA ACCCCCGGCT
 551 CCGGCTCCGA CTCCAACCTC GCGCCTGTCC ATTTCTCTCC GAGCCACAGT
 601 GGTAGCCAGG ATGGAAGGCA CCTCCCAAGG GGGCTTGCAG ACCGTCATGA
 651 AGTGAAGAC GGTGGTTGCC ATCTTTGTGG TTGTGGTGGT CTACCTGTC
 701 ACTGGCGGTC TTGTCTTCCG GGCATTGAG CAGCCCTTTG AGAGCAGCCA
 751 GAAGAATACC ATCGCCTTGG AGAAGGCGGA ATTCCTGCGG GATCATGTCT
 801 GTGTGAGCCC CCAGGAGCTG GAGACGTTGA TCCAGCATGC TCTTGATGCT
 851 GACAATGCGG GAGTCAGTCC AATAGGAAAC TCTTCCAACA ACAGCAGCCA
 901 CTGGGACCTC GGCAGTGCCT TTTTCTTTGC TGGAAGTGT ATTACGACCA
 951 TAGGGTATGG GAATATTGCT CCGAGCACTG AAGGAGGCAA AATCTTTTGT
 1001 ATTTTATATG CCATCTTTGG AATTCCACTC TTTGGTTTCT TATTGGCTGG
 1051 AATTGGAGAC CAACTTGGA CCATCTTTGG GAAAAGCATT GCAAGAGTGG
 1101 AGAAGGTCTT TCGAAAAAG CAAGTGAGTC AGACCAAGAT CCGGGTCATC
 1151 TCAACCATCC TGTTCACTCT GGCCGGCTGC ATTGTGTTTG TGACGATCCC
 1201 TGCTGTCATC TTTAAGTACA TCGAGGGCTG GACGGCCTTG GAGTCCATTT
 1251 ACTTTGTGGT GGTCACTCTG ACCACGGTGG GCTTTGGTGA TTTTGTGGCA
 1301 GGGGAAACG CTGGCATCAA TTATCGGGAG TGGTATAAGC CCCTAGTGTG
 1351 GTTTTGGATC CTTGTTGGCC TTGCCTACTT TGCAGCTGTC CTCAGTATGA
 1401 TCGGAGATTG GCTACGGGTT CTGTCCAAAA AGACAAAAGA AGAGGTGGGT
 1451 GAAATCAAGG CCCATGCGGC AGAGTGGAAG GCCAATGTCA CGGCTGAGTT
 1501 CCGGGAGACA CGGCGAAGGC TCAGCGTGGA GATCCACGAT AAGCTGCAGC
 1551 GGGCGGCCAC CATCCGAGC ATGGAGCGCC GCGGGCTGGG CCTGGACCAG
 1601 CCGGCCCCACT CACTGGACAT GCTGTCCCCC GAGAAGCGCT CTGTCTTTGC
 1651 TGCCCTGGAC ACCGGCCGCT TCAAGGCCTC ATCCCAGGAG AGCATCAACA
 1701 ACCGGCCCAA CAACCTGCGC CTGAAGGGGC CGGAGCAGCT GAACAAGCAT
 1751 GGGCAGGGTG CGTCCGAGGA CAACATCATC AACAAGTTCG GGTCCACCTC
 1801 CAGACTCACC AAGAGGAAAA ACAAGGACCT CAAAAAGACC TTGCCCAGG
 1851 ACGTTCAGAA AATCTACAAG ACCTTCCGGA ATTACTCCCT GGACGAGGAG
 1901 AAGAAAGAGG AGGAAACGGA AAAGATGTGT AACTCAGACA ACTCCAGCAC
 1951 AGCCATGCTG ACGGACTGTA TCCAGCAGCA CGCTGAGTTG GAGAACGGAA
 2001 TGATACCCAC GGACACCAAA GACCGGGAGC CGGAGAACAA CTCATTACTT
 2051 GAAGACAGAA ACTAA

FEATURES:

5'UTR: 1 - 433

Start Codon: 434

Stop Codon: 2063

3'UTR: 2066

HOMOLOGOUS PROTEINS:Top 10 BLAST Hits:

			Score	E
gi 10863961	ref NP_066984.1	potassium channel, subfamily K, me...	1054	0.0
gi 8452900	gb AAF75132.1	AF196965_1 (AF196965) potassium channe...	1037	0.0
gi 6754432	ref NP_034737.1	potassium channel, subfamily K, mem...	486	e-136
gi 5712621	gb AAD47569.1	AF129399_1 (AF129399) TREK-1 potassium...	483	e-135
gi 9622335	gb AAF89743.1	AF171068_1 (AF171068) two-pore domain ...	483	e-135
gi 4101566	gb AAD01203.1	(AF004711) two-pore potassium channel...	473	e-132
gi 7705562	ref NP_057695.1	potassium inwardly-rectifying chann...	318	9e-86
gi 6680540	ref NP_032457.1	potassium channel, subfamily K, mem...	309	4e-83
gi 9988112	emb CAC07336.1	(AL136087) dJ137F1.2 (novel member o...	201	2e-50
gi 4504851	ref NP_003731.1	potassium channel, subfamily K, mem...	180	4e-44

BLAST to dbEST:

	Score	E
gi 3400036 /dataset=dbest /taxon=9606 ...	293	6e-77

EXPRESSION INFORMATION FOR MODULATORY USE:

library source:

Expression information from BLAST dbEST hit:

gi|3400036 Human testis

Expression information from PCR-based tissue screening panels:

Human bone marrow
Human colon
Human fetal brain
Human fetal heart
Human feftal liver
Human heart
Human kidney
Human pancreas
Human testis

1 MKFPIETPRK QVNWDPKVAV PAAAPVCQPK SATNGQPPAP APTPTPRLSI
 51 SSRATVVARM EGTSQGLQT VMKWKTVAI FVVVVVYLVT GGLVFRALQ
 101 PFESSQKNTI ALEKAEFLRD HVCVSPQELE TLIQHALDAD NAGVSPIGNS
 151 SNNSSHWDLG SAFFAGTVI TTIGYGNIAF STEGGKIFCI LYAIFGIPLF
 201 GFLLAGIGDQ LGTIFGKSIA RVEKVFRKKQ VSQTKIRVIS TILFILAGCI
 251 VFVTIPAVIF KYIEGWTALE SIYFVVVTLT TVGFGDFVAG GNAGINYREW
 301 YKPLVFWFNL VGLAYFAAVL SMIGDWLRVL SKKTKEEVGE IKAHAAEWKA
 351 NVTAEFRETR RRLSVEIHDK LQRAATIRSM ERRRLGLDQR AHSLDMLSPE
 401 KRSVFAALDT GRFKASSQES INNRPNLRL KGPEQLNKHG QGASEDNIIN
 451 KFGSTSRLTK RKNKDLKKTLL PEDVQKIYKT FRNYSLDEEK KEEETKMCN
 501 SDNSSTAMLT DCIQQHAELE NGMIPTDTKD REPENNSLLE DRN

FEATURES:

Functional domains and key regions:

[1] PDOC00001 PS00001 ASN_GLYCOSYLATION
 N-glycosylation site

Number of matches: 7

1	149-152	NSSN
2	152-155	NNSS
3	153-156	NSSH
4	351-354	NVTA
5	483-486	NYSL
6	503-506	NSST
7	535-538	NNSL

[2] PDOC00004 PS00004 CAMP_PHOSPHO_SITE
 cAMP- and cGMP-dependent protein kinase phosphorylation site

361-364 RRLS

[3] PDOC00005 PS00005 PKC_PHOSPHO_SITE
 Protein kinase C phosphorylation site

Number of matches: 12

1	7-9	TPR
2	45-47	TPR
3	7-9	TPR
4	45-47	TPR
5	51-53	SSR
6	105-107	SQK
7	331-333	SKK
8	359-361	TRR
9	376-378	TIR
10	410-412	TGR
11	455-457	TSR
12	459-461	TKR

[4] PDOC00006 PS00006 CK2_PHOSPHO_SITE
 Casein kinase II phosphorylation site

Number of matches: 8

1	125-128	SPQE
2	155-158	SHWD
3	267-270	TALE
4	334-337	TKEE
5	416-419	SSQE
6	469-472	TLPE
7	485-488	SLDE
8	537-540	SLLE

[5] PDOC00008 PS00008 MYRISTYL

[illegible][illegible][illegible][illegible]

$\frac{d}{dt} \left(\frac{\partial L}{\partial v^i} \right) - \frac{\partial L}{\partial x^i}$
 where $v^i = \dot{x}^i$ and $L = L(x, v, t)$.

BLAST Alignment to Top Hit:

>gi|10863961|ref|NP_066984.1| potassium channel, subfamily K, member
10 [Homo sapiens] >gi|10198115|gb|AAG15191.1|AF279890_1
(AF279890) 2P domain potassium channel TREK2 [Homo
sapiens]
Length = 538

Score = 1054 bits (2697), Expect = 0.0
Identities = 526/526 (100%), Positives = 526/526 (100%)
Frame = +1

Query: 52 VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGLOTVMKWKT V 231
VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGLOTVMKWKT V
Sbjct: 13 VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGLOTVMKWKT V 72

Query: 232 VAI FVVVVVYLVTGGLVFRALQPFESSQKNTIALEKAEFLRDHVCVSPQELETLIQHAL 411
VAI FVVVVVYLVTGGLVFRALQPFESSQKNTIALEKAEFLRDHVCVSPQELETLIQHAL
Sbjct: 73 VAI FVVVVVYLVTGGLVFRALQPFESSQKNTIALEKAEFLRDHVCVSPQELETLIQHAL 132

Query: 412 DADNAGVSPIGNSSNNSSHWDLGSAFFAGT VITTIGYGNIA PSTEGGKIFCILY AIFGI 591
DADNAGVSPIGNSSNNSSHWDLGSAFFAGT VITTIGYGNIA PSTEGGKIFCILY AIFGI
Sbjct: 133 DADNAGVSPIGNSSNNSSHWDLGSAFFAGT VITTIGYGNIA PSTEGGKIFCILY AIFGI 192

Query: 592 PLFGFLLAGIGDQLGTIFGKS IARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 771
PLFGFLLAGIGDQLGTIFGKS IARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA
Sbjct: 193 PLFGFLLAGIGDQLGTIFGKS IARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 252

Query: 772 VIFKYIEGWTALES IYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFILVGLAYFA 951
VIFKYIEGWTALES IYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFILVGLAYFA
Sbjct: 253 VIFKYIEGWTALES IYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFILVGLAYFA 312

Query: 952 AVL SMIGDWLRVLSKKTKEEVGEI KAHAAEWKANVTAEFRETRRRLSVEI HDKLQRAATI 1131
AVL SMIGDWLRVLSKKTKEEVGEI KAHAAEWKANVTAEFRETRRRLSVEI HDKLQRAATI
Sbjct: 313 AVL SMIGDWLRVLSKKTKEEVGEI KAHAAEWKANVTAEFRETRRRLSVEI HDKLQRAATI 372

Query: 1132 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 1311
RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN
Sbjct: 373 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 432

Query: 1312 KHGQGASEDNI INKFGSTSR LTKRKNKDLKKTLPEDVQKIYKTFRNYS LDEEKKEEETEK 1491
KHGQGASEDNI INKFGSTSR LTKRKNKDLKKTLPEDVQKIYKTFRNYS LDEEKKEEETEK
Sbjct: 433 KHGQGASEDNI INKFGSTSR LTKRKNKDLKKTLPEDVQKIYKTFRNYS LDEEKKEEETEK 492

Query: 1492 MCNSDNSSTAMLTDCIQQHAELENGMIPTDTKDREPENNSLLED RN 1629
MCNSDNSSTAMLTDCIQQHAELENGMIPTDTKDREPENNSLLED RN
Sbjct: 493 MCNSDNSSTAMLTDCIQQHAELENGMIPTDTKDREPENNSLLED RN 538

>gi|8452900|gb|AAF75132.1|AF196965_1 (AF196965) potassium channel
TREK-2 [Rattus norvegicus]
Length = 538

Score = 1037 bits (2653), Expect = 0.0
Identities = 520/543 (95%), Positives = 529/543 (96%), Gaps = 1/543 (0%)
Frame = +1

Query: 1 MKFPIETPRKQVNWDPK VAVPAAAP-VCQPKSATNGQPPAPAPTPTPRLSISSRATVVAR 177
MKFPIETPRKQVNWDPK VAVPAAAP VCQPKSATNG P P RLSISSRATVVAR
Sbjct: 1 MKFPIETPRKQVNWDPK VAVPAAAPVCQPKSATNGHHPV-----RLSISSRATVVAR 54

Query: 178 MEGTSQGGLOTVMKWKT VVAI FVVVVVYLVTGGLVFRALQPFESSQKNTIALEKAEFLR 357
MEG SQGGLOTVMKWKT VVAI FVVVVVYLVTGGLVFRALQPFESSQKNTIALEKAEFLR
Sbjct: 55 MEGASQGGLOTVMKWKT VVAI FVVVVVYLVTGGLVFRALQPFESSQKNTIALEKAEFLR 114

Query: 358 DHVCSVPQELETLIQHALDADNAGVSPIGNSSNNSSHWDLGSAFFFAAGTVITTIGYGNIA 537
 DH+CVSPQELETLIQHALDADNAGVSP+GNSSN+SSHWDLGSAFFFAAGTVITTIGYGNIA
 Sbjct: 115 DHICVSPQELETLIQHALDADNAGVSPVGNSSNSSSHWDLGSAFFFAAGTVITTIGYGNIA 174

Query: 538 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 717
 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI
 Sbjct: 175 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 234

Query: 718 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFYVVTTLTTVGFGDFVAGGNAGINYRE 897
 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFYVVTTLTTVGFGDFVAGGNAGINYRE
 Sbjct: 235 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFYVVTTLTTVGFGDFVAGGNAGINYRE 294

Query: 898 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 1077
 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET
 Sbjct: 295 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 354

Query: 1078 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 1257
 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE
 Sbjct: 355 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 414

Query: 1258 SINNRPNLRLKGPQLNKHGQGASEDNIINKFGSTSR LTKRKNKDLKKTLPEDVQKIYK 1437
 SINNRPNLRLKGPQLNKHGQGASEDNIINKFGSTS+LTKRKNKDLKKTLPEDVQKIYK
 Sbjct: 415 SINNRPNLRLKGPQLNKHGQGASEDNIINKFGSTSKLTKRKNKDLKKTLPEDVQKIYK 474

Query: 1438 TFRNYSLDEEKKEETEKMCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLL 1617
 TFRNYSLDEEKKE+ETEKMCNSDNSSTAMLT+CIQQ AE+ENGM+P DTKD+ ENNSLL
 Sbjct: 475 TFRNYSLDEEKKEDETEKMCNSDNSSTAMLTECIQQAEMENGMVPMDDTKDQGLENNSSLL 534

Query: 1618 EDRN 1629
 EDRN
 Sbjct: 535 EDRN 538

Hammer search results (Pfam):

Model	Description	Score	E-value	N
PF00914	Transmembrane region cyclic Nucleotide Gated	17.5	0.00072	2

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF00914	1/2	161	201 ..	142	182 ..	15.7	0.0023
PF00914	2/2	271	286 ..	143	158 ..	8.0	0.33

FIGURE 2, page 4 of 4

1 CCTAAGGGTG CAGTTCCTGC CACAGGAATT TGCCTTGGAC AGTGAACATA
 51 TTCCCCAATG CAGACCCAG AACACAACCA TAGGTCAGTT CATTTTGCAA
 101 AGGAGGAGGG CCTGGAGGCT TGGAAAATAT CGTATTAGA CCTTCATTAC
 151 CCAAACGAAC CCATGGGACA GGTTTCAGGGT CAGATTCATG GGTCCCGGGA
 201 CTGGATGAGC TCACAAGGTT CTGGCATGGA GAGCATGGAC CTTTGTGTCA
 251 ACAAACCTGG GTTTGAATCC TCATATCGTG ACCTTGGGAA TGTTTCTTTA
 301 TCTCTCTGAG CCTTGATCTT CTCATCTGTA AAAGGAGGCC AGTTACAGCT
 351 TCTGCAAAAT GATCTAACAA AGATGAATGG AGAGGAAATA TGAGATGGTG
 401 AGGGGGAATT CAGTAAATGT CAATCTTGCC TCCCCGTGCT CTGAGGACTC
 451 AGGAGAGGGT GCTTTTCTCT GCTGAAGCCC CTCTCTGACT CTGATGCATG
 501 TAAAAACAT TGTATTGCAG TGACTGTGCT AGAGTCCAGC TGTCCGTGAA
 551 CAGTTAAAGA GAAGAGCGCA GAGGGAGGTT CGAAAGCCTT TCTTAGAAGC
 601 ATCTCCCTCT GGACTTGAGA ACAGAAATTA CATAACACT GGTGTCTCGG
 651 GGCATGCTCG GGAGAAGCAG AGATTCCTTG TTTGTTGAT TTCTATGTCT
 701 TAGCCATCCT CCCAGTCCTA GTAGAGAGAG GCAAAGTGTG GTTACAGAGT
 751 CCAGGGAAGA TGGTTCGTAA GCACCCGGA ACCTGCCTAA AGGGCTGAAG
 801 AGTCAGAGTA GCACCATCAG ATTGGTACCA GTTTTGCTG AACGGGGTTT
 851 GCAGAGAATT CAGGGCTCCA GCCTGGGGTG CCTGTGACAG CCCAGTGACA
 901 AAGCACTCAC CTTTCCCACA GACCACAGCG GACCTCTGTA GGTCTTGCTC
 951 TTGGACTCAG AAACCTTGAT GTGATAGTGA GGGATGGATG GTGAGAAAGA
 1001 TGCTGTGAC ACAGGGCTCC CCAGAAAGCCT CAAGGTGCCG TAGAGTAGCA
 1051 TGCAACTTAG AGATCAGCTG CTAGTGTGGG ATTTTAGGAC CCCAGCTGGC
 1101 AGGCATAGGA ATGAGCTGGG CAATTTCTAT GCGTAAGTAA AGGCAACAAC
 1151 AATCTAACAG GACCTTATGG CACTAGATAG TAAGCCCAT GAAGGCAAGA
 1201 TCTCTGTCTT GTTCTCTGCC ATATGGCCAG CACATAGCAC AGTGATGGCA
 1251 CTTGGAAGGG GTTCAATATA TATGTTGAAT GAACAACAAA TTTTAGTAAC
 1301 CTTATCTGGA AGCCAGAGTA GGGGTTTAAA CTACTTCTTA TCCAACACTG
 1351 CAGCATGCAA TTCATGTCTT CATTTAGCAA GTATTTCTTG AGCACCTACT
 1401 ACGTGTAAGG CTCGTTGCG AGGCATCCGA AGCAATTTGT CAGCATCATT
 1451 CATGTTGATA CTCGGAGTGA CCCGTTCAAG AGCACCTCAG CACCACCTGG
 1501 CTTTTCTGAA GACTGAGGCC CCACCACAAA CCCCTGTGGG GCTTCAAGCA
 1551 GGGGAGTGA GAGGGCGTTA GACGAATGCT CCAGGTTTAG CCCCTTTCCG
 1601 GGAACAGGTC TGGGTCCCTT CGCATCTGCC CTGCTGGTCC CAGGATCCCG
 1651 GGGCCGCGC TTCCGGGAGC TGCCGGGTCT TGGCAACTCC GCTTCTCTCC
 1701 GGGGGCCCC GTGCCCTCTT CAAGCCTCCT TTCCAGCCAA CGACCAGCGG
 1751 CCCAGTCCG GCTGCAGTGA GCTGGGGAAG GGACCAAGCT GTGCCTTGGG
 1801 AGCGAGCTTC CCCGGGCGG GAGAGCGCAG CAGATGCGGA GCGGTCCAG
 1851 AACAAAAGGC TCATGGCTGG CACGGGCTC CTTGGAGTGC GCGGGGACG
 1901 TGGGTTCCGG ACTCAGGCGA GAGAGCCAGA CGCGGGAGGA AAAAAATGA
 1951 AGTGAGAAAA GAGAAGGAGG GAGAGCTCAG GGTGAGAGCG GTGAGAAGAG
 2001 GTGACCCGGA GGCCGAGGTC TGCGGCGGAG CCGCAGCGGC CTTCTCTCCG
 2051 CCTCTCTGAC CGCTTCCAG GCAACCAAGC GTGTCTCCGG CTGCAACTCC
 2101 AGCAAGCGCG CGCTGCGCG CTCCACGCC GCGCGCGCG CCGCGAGCC
 2151 AGTAAGTAGC GCGCGGCCA CCGCTCGTTC CCCGCCCTC CGCGGCTTCC
 2201 CCGCCACCGC CCACCGCTC CCGCGCCCC GCGGGCAAGT CCGCGACCGC
 2251 CTCCCGCTGC CCCGAGCCG GTGCCGGGG CTCAGCGCG CTTCCAGCT
 2301 GGGAGCCTCG GTCCGTGCT CGCCCTGCTC CTTCTTCCG GGGCGCGCG
 2351 TCTGGGGCGC GCGCGGGGA GGGTCGCCCT CGCCGCGCG TGCCCGGGCG
 2401 CCGCGCCACC CCTACATCCA ATGGCTTTCG GGGAGCGGGA AGTGGGGGGC
 2451 GTCGCGGGG GCGAGGAGCC GCGCGCGGG TGGGGCGTGT GCGCTCAGCG
 2501 CCGCCGAGCG AGGCTGACGT GCGCGCCAA GCGCGCGCC GGGAGTGTGT
 2551 GTGCGGGTGT GTGTGTGCG GAGTGTGTG GCACACGCCT TCGGGGGCTG
 2601 GAGTGACACT GCAGTGGGCT TCTCCGTAGC CCCAGCCTC AGGCTGCGCA
 2651 GCCCCTAACC TGCCGGCACC GCTTTTGGGA AGCAGCTTGG CTCTTCCATC
 2701 TCCCCAAGCC TTCTCTCCA TCCTTTCATC CACCCCTCG CGATCTTACT
 2751 TTTTCTTTA CCCACGGGG CGCGGCCGG CACCCCTGG CCGGTGCAAA
 2801 CACCCAAGCC CTCTCCAGTT CTCCCCAAG CTAATATTTT CCCACCTGTC
 2851 TTTTCTGGG GTTCTCTCAC GAGCCAGTCC AAGGCTCCCC CATCCTCGGA
 2901 AATTGTTTTG TTGACTGCT AAACCGAGGC GTGTAAAGCT TGAGGACTTT
 2951 ATTATTATTT GGGTCTTTT CATTTCTTCC CTTTCTGGG AACGAAGCAA
 3001 TGAAATTTCC AATCGAGAC CCAAGAAAAC AGGTGAACTG GGATCCTAAA
 3051 GGTGGGTGTT TCCTACTTTT GGCTGCCCTC GCCCTGCCCT TGCTCCGGC
 3101 GTGTGCGCGC TTCCTTGAGT GGAAGCACTC TTGCTTCTGG CAGCGTGTGT

FIGURE 3, page 1 of 107

3151 CCTGAGGCTG GGAAATGCGC CTGGGAACTG CAGCGCGGGT GGGAGGAGGG
3201 CGGAGGCAGC GTGGGTTCG AACCAGATA GTGCCTGTCA TTACCACATA
3251 ATCATTGTCC CTCCTAGATT GTCTCCAGAT CTATTAGAT AGACCAAGCC
3301 GACTGTTTGG TTTGAAATTG CAAGTGTCCG TATTTGCTTT TGACTTTGAG
3351 TGTGCGAGTG TGTGTGTGTG TGTGTGTGTG TGTCCCTTGT TTCTGGTGAT
3401 CTTTGTCTCT CTGGCAGATG GGTGGGGTGC TTCCCCCTGG ACCTGGAGCT
3451 GCGCCGCTAG CCCGGGTGTC CTCAGTGGGA AAGGTTTCCT GGCAGCAAGT
3501 GGGGCTCGAG TTGCAGCAGC CGTCCCTAGG GGTGGGCCGT TCTCGCAGGG
3551 CATGCAGAAT AATGGAGCCC ACAGGGCCTC CTGAGTCTTC GTTCAATCTT
3601 ATTACCAAAC CTAGGCAAGT GTTAGGCTCA GGTGAGTA GAAGCAGGAG
3651 GAGGGGTGGT TTGTGAGAAG GGTGGGGCTG GCAAGGCATA GGGGAGGGGC
3701 ACGAAGTGTG CCCGCCAAG CAATGGTGTG GTTTGCATGC TTTTACGAAT
3751 GTTGGACCAG GTTTCATCCA CGCAAAGGG AGGGATTAAG ACGGATTTGT
3801 GTGTGCCTAG CGTCGGCCAC CGTGTCTGTA ATTAGCATAC AGATGTTAAG
3851 GCTCCAAGGG AGTGATCAGT ATGAGAGCAG AACAAGTTGG AACCGCGTGT
3901 CCAGTTGTGT CAAGAATGCT CTTTAGCATT TCTTGTAGCT CATCTGACGA
3951 CTGTGTGAGG CTAGGCAACG CCTCTGTGTG TATTGGAATT GAAATTTGTT
4001 TATTTGGGGT GCGTGTGTGT TTAATGTTCT TTATGAGCGC ATTTCTTCTT
4051 TTTCTCCAGA CTGGAAAGAA GAAACCATCT TATTTGTTGA GTAAATGTCT
4101 TAGGAAATGA CTGGCTATTG AAGAGTGAGT GAAGAGATAC TGCCTTTTGA
4151 AAACACTGAG GCTGTTACAT CTTAAATACA GCCCAAACCT TCTATTTTGT
4201 CTCTACTTGA AATCTCTGGA AATATGGAGG TGTGCCTTTG CTTTTTTGGG
4251 GGGAGAAATCC CTGAAAAGCA TATTTGTTAA ATACCTATTA CATGCTAAAC
4301 ACTGTCTTAA GCTCTGAGA TACAGTCAGA ACAGGAAAGA TAAAAGCTCT
4351 GACTTGGAGT TTACAGTGAG GGAGACAGAC CTAAATCAAT TCCATGGAGG
4401 AATGCATAAT TCAAAGTTTA TGTATGCTCC AGGGAGAGCA TCAGAGGTTT
4451 AAGAAAGTGT CTGATAGAAG AGATTGACAA GGACCAGAGA AGGCTTCCCT
4501 GAGGACATGA CACTTGGACT TAGGCCTGGA GGATGTATAG GAGTTAATTG
4551 TCTAAGGAGG AGGGGAATTG TTGCAGAAGA GGGAACAGCA AGTGCAAAGG
4601 GCCTGAGGCA GAAGAGGTAT GTGTATATGA TGAAGTAAA GGAGGTTCCC
4651 ATGGCTACGG CAGAGTGAGT GAAGAGGTAT TGCCTTTTTT AAACACCCAG
4701 GCTGTTATAC TGTAATATACA GCACAAACCT TTCATTTTGT CTCTATTTGA
4751 AACCTCTGGA AATACGGAAG TGTGCCTTGG CTTTCTTTTG GGAAATCCCT
4801 GAAAAATGTA TTTATCCCTA GCAGAGAGCA AGAGGGCTTG TGTTTTGAGA
4851 TATGACTGGG GGATCCACAG GCGAGACGCC CCCCTCCAAG CCCTGTGTTG
4901 TTGGAGGTGG GGTAGCATTG TGGGGTTGGA AGAGTATAGT ATTTATCTAA
4951 AGCCAAATGAA GAGTTTCAAG ACGAGGAGTG ACATGATTTG AGCTAAGTTT
5001 CAAAACAAGT GCTGTGTGGC TCTTGTGGAT GTAGGGGACC AGATACAATG
5051 GTAGCATGGG CCAGGGTGGT TGCTGTGGGC ATGGAGAAGC GGACGGAGTA
5101 GAGAGCTGTA GAGGACGTGA AATCAACAGG CTTTGCATGA ATAATGTGTG
5151 GAAGTGAAGT GAAGGAATTG GAATGACTGA GATGGCAGCC AGGGCAGGAC
5201 CAGTCTTGAA GGAAGCTCA TGAGTTCAAT CTAGGACTTG TTGAGTAGGA
5251 CATGTCCCCA AGCCATCCAA GGGGTGTGTT AGGTGGGCAG CTGTCTAAGT
5301 GCTGGGGTCA GGATCTTCAA GGAACAGAGG GAGTACCGTG AGACTGATTT
5351 TGTGAAGCTG GCTTTGTGTT TTAAGGTACA TTTCTGTGTG ATCATCATTC
5401 TATATATTCA TGTTACAGTG ATGAACACAG ACAAATTTTA CACATTTTAC
5451 AGCCTGACAC AGTGAAGAAA AGCATACAAA TAGCACCTTC AGTTACAACC
5501 AGTGGTGCTA AAAATGAAAA AAACCTCAAT AAAAATAACA ACATTTAATG
5551 AGCAACCATT GCATGCCAGG TGCTTTATGT ACATTGTTTC ATACAATTAT
5601 TTTTACAATA CTTATCTGAT GGTATAAGTG TTATAGTTCC ATTTGGCACT
5651 TGATTGCCAT CATGACACCA CTAATCTGCC TTCCAGTGGA GTTGCTCTGA
5701 CTTTGTGCAC AGTTATTCCC AAAGGTAGGG GTGACAGTAG TCTTTTCTA
5751 GCCAGGGGAT GGAGGAGGGA AGAGAGTGAG GAGTGAGGTG GCATATCTCT
5801 TATCTGTATA GAATTATGTG CTAGGTGCTC TTCTAATGTT TTACATGTGT
5851 TAATTTAATC TTCACAAACA TTTTAGGAGA AAGGTATTAT CCTAATTTTA
5901 CAGATGAGTT AACTGAGGAA CAGAGAGTTT GAGTAACTTG CCCAAGGTTG
5951 CACAGCTAGT AGGACAAGAT TAGAATCTGG GCTCTTAAAC ACTCTTCAAG
6001 TCTGTGTTTC TTATTGGGAC TTTTGGCTTT TGCCTGGTAA GGTTCCCAAA
6051 GCTCAGGAAG TGGAGAAGCT TGTTGCGAGG AGGAAAAGGA GAAGAGAGAG
6101 GATGAAGAGG AAAAGGGAAT GGAATAGGAG GAGGATAAAA GAGAGGAAGA
6151 GAGAGGAGGA AGGAGAAGAG GAGACAGTGG CTCAAGCTTA CCCTACTTGT
6201 TCCTTTCTCT ACTAACCTAT TCAGACAATA ATCTTTTCAT TTCCATGTCT
6251 GATGGGCAAG TCAGTGACTA CTGGACAGAG TTTGGGTCTC TGTTTTGGAG

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6301 GTTCTGGATT ACACAGACCA AATGTGTTTA GCAGGGAAAA GATGAAGGGG
6351 AGCCCAGCAG TATTAGGGGA AAGTGGAGAG ACAGTTCACA TTACTTGGAC
6401 TGTAGGATAT GTCTATCAAC AGACATGACC CTTCAGGCGG AGGTGCTCTC
6451 ATGGGTTCCTG GAAGGCAGTT GTAATTATAA TGTTTTTCTT ACAGCCTTAT
6501 TACCCTACAA TTTAATAGCA AAAAATGAAG GTGGTTTGAG AATAGATTGG
6551 TTTGGATAGC ATTTGGGTGG ATTAAGCAAA GCATTGTCAA GAGGTGTAGG
6601 TAAAAACAAG ACCCAAATAT AAAATGGTTC ATCTCTGGTG AGCTATGGCC
6651 TTCCTTCATA TTCATGGAAC AGAGACTTCT ACGAAGAGCG TTACTGTTTG
6701 TGTAGGACCT ACCACAAGTA GATTGGTTCT AAGTCTTAGC TTTCATAGCA
6751 GAATTTACGT GCACTTTAAA TCATCAGCAT CATTTGTTGA TGATTTTCTG
6801 CTTAAATTTG GTATTTACTT GCTGCTTATG TGTATTAGA TCTTTTAAAA
6851 ACCAGTGAGA TCTGCAAATA GTATTCCTCT CACTAGAGGC AAGCAGATGA
6901 ATACAGTGTA AAAAACTTT GGATTTGGGG GCAAAATAAT TAGGTTCTAA
6951 AAGCAGCTGT AGCAATACTT AGTGGTATGA CTTTGGGCTG CTCAATTAGC
7001 TTTTCTGGGT TTCGCTTCCC TTCCATGGAG AAAGGAGTCA TTGCCTTTGT
7051 CTACCTCTCT GACTTTGTCT CTTCAACTTT CCCCATCTTG ATCTGATCTT
7101 GGGGCCAGTT GGCTTCCCTT CATTCCTCAA ATAGATCACA CTTGCATCTG
7151 TCTGAGGGCC TTTGCGCTTG GAATTCACAC TGCTTATAAT GCATTTACAG
7201 TAGTTGGCTC CTTTCTGTCA TTTGAATCTC AGCTCAGATG TCCTCTTGTT
7251 AGCAAGGGAT TCCCTGTCTT ATCTGAAAGA CCTCTCCTCC TGTTCGCCAG
7301 CACCATCATT TTCTCTGTG TCACCTATTC GATTGTCTTA CTGGCACTTG
7351 TCATGATTTG AAACCATCTC ACTTACTCAT GGGTGACATT TGATGCCAGC
7401 CTCCTTTACT AGCATATGAG GTGCATGAGC AGGGACTTTC TCTGTCTTGT
7451 TTATTGCCAT AACCCAGTG CCCTGGAAAG TGCCCTGGCAC TCAATAACCC
7501 TTTGCTGAAT GAATGGAAGG TTGGCAGGAT GGACTGGAGA GGACTGAAGG
7551 CTTTATGCCT CATGGAAATT GCAGGACGCC TCTCAGCTAT AAATGGCAAA
7601 GTACAAATAA GGAGAAAGGA AGAATATCCC CAAATAGTGG CATATCAGAA
7651 AGGACGCTGA TATTCCTACT TCCTTGCAAG CTCCAGCTCG CTCTAAACCT
7701 CCAGTGCCT GTTTTCCCTT TTTTCTCGTC TTTGACCAGA AGTAAGAAGG
7751 CTGATAGAA GTGCAGTGAG GGTGGATGGG TGGACTGATC TAGCCTGCTG
7801 AAGATATGGT CAGTGTCCTA TAAATAATTT GGCTCATATT AGCTATTGGA
7851 GTGTGGCTAT TTTTAGGCAC TTTAATCCAC TTAAGAAAGA AGCAAAGCTC
7901 TAGGAGTGA GGTGGATTTT TTTTAAATG CTACACTTTT AGTGCACACT
7951 TTAATGCAAA ATTCTGGAGA AGCCCATACC TTATGTGCAT AGCACCTTTC
8001 AGTTTACAGA ACACTTTFTA GGAATGATCT CATTTGTACT TTAAAAAACC
8051 CTATTTTGT AGGGATTAGA GTCTTAGATT TACTGACAAA TAAAGCAAGA
8101 TGTAGAAAGG ATCAAATGATT TATGTGGGAG CCCAAAGCAA CAAACAGGCA
8151 GAGCTGGGGC TACCCTAGGC CTTTGTATGC TTACGTCCAT GACAGTTTCC
8201 TTCAAGCTTT CTTTCTCTCC AGCGACTTTG TTCATTCCAC ACTCTCCTGC
8251 TCTTTGTAT CCAAAAGTGT GTTCAAAGGT TTCTCTGAGA GATTTAGAGG
8301 AAGCAGTCTC CTTGTTGATC AGTGAATCTT TAGTTGATGG CTATTTTCAG
8351 CAGGTTGTGC TTATTGTACA GGTCTACACT TTCATTCTAT GAGCTCAGGT
8401 GAAGACCTTT AGACTTCTCT TCTGCTGTAC TGGCTAAAAG AAGATTTTGG
8451 TCTTTTGTGA ATGGGGGCCA TTTTCAACTT GCTAGGTTGC TTAAGTGCTA
8501 GCTTTATTAA CGTGTTTCCA AACACACATT TGTGGAGCTT AGATTTCTCTG
8551 GAAAGAAAAT AATCTATTTT TGATTTAATA TCCAATTTTC AGGAGATCAG
8601 TGTTCCAAAT GGGATTAAAA ATGTGCCAAA ATCACCACAA TTATCTCAA
8651 AAGTACCAAG GAACAGTGTT CCAAAGACTG TCTTGCCAA GATTTGGTTC
8701 AGGCTTCTTT TCCAGCAGTG TCTAAGGAGC TTCACCATCC TTTTGTCTAA
8751 TCCCAGTGAT CACTGGGTTG AATTAAGACT GAGCAGGTTG ACTTTGCTGT
8801 TCCACACCAT TTCCAAAACA TCTGTACTTT GGCTCCATAT GAACCCACC
8851 TTAAATCTGA TGCATTTAAA AAATATAATA TAGTCTTCC CTCATTAGG
8901 AAACCTCAAC CACAACGAG ATATGGTGTG AAGTATATTT AATATAGGCA
8951 CAGTGAGCTA GTGATTTCTT TTTGACTTTT AGTCTACAGG AAATTAGAGG
9001 AAGAGTTTAA TGATAAAATG GAAAGAAGCC ATTCTACTGA TAGCCAGTTA
9051 GGAAGTTTCA CTTTGGACAG CTCCCTTGGC TGATGCAGAA AGGTGGATAA
9101 AAATGACAAAT CTTTTCTGT ACTCTGATTC TTATAAAGGG CACCTACTGG
9151 ATGATCCAGA TGAGGTTAGA GTGAGTTAGG GGCTTAGCTC TACATGGCAT
9201 GTTTACAGAA TCTACCTAAC CGTGGCACTA GGAGTGTGGT CACCCTGTTG
9251 GTTCCACCCA CCTGGGTGAT TTCTCTCCAT AAGAATCATG GAGGTCAAAG
9301 GGACCTTCCA CTTCTGGGGT CTGGTCTTAG GGGTACTCTC AGCGGAGACT
9351 TTACAGTTTA TCTATGTCTG GCTCATTACC ATCACCACA ATGGGGAAAT
9401 AAAGACCTCA TATTTACTTG CTAGAACATC TATTTGTCAT TTGCAGCCAC

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9451 AGTTTAAAGAG TTTTTTTTTT CTCCCTGTGA GTGTCTAGGA CTGAGTACTC
 9501 TGAATTGAAA ATGAAACCTG ACTTCCTAAT CCTCCATTTA GGGTTGAAGG
 9551 GAGGGAGTAA GGGTCATAAT CACTGGCAGG GGAGGGCAGG GTCATGAGGG
 9601 AGCATTGCAT TCTTTTCCTT TGCCATTCCC AGAGCCAGGG AGATGGGGAG
 9651 GGGTGGGCAT TGGAGGTAGT GGGGATGAGG CTGGGAGATG GATGGGATTT
 9701 CAGGAGATTT TAGGTTTTGT ATTACCAATA ACTGCTAGTC TCATCACTTA
 9751 CCCTTTCAT GGAAGTAACT TTGAAGCAGA GTGGAATGGT GGGGAAACAA
 9801 GATTAGAAAG GAAAACATAG GATTTACTGC CATAcataag CCAGGTGATC
 9851 ACAGGGAAC TTTCCCTCAT TCCTCCCGTC CTTCTTTTCT TCATTCCCTT
 9901 GTTCCCTCCC CACCCCATC CCCCCAAATC CTGCAGAGTC TTGATCTCAA
 9951 TTGCTCTCGC TTGTGCAAAG GGTCCCTTCT CCCTTACTCA ACTACCCAGT
 10001 GTGGTGGGGC TGGTGGTATT TACAGTTTAA AAAGAGTTGC TTGAATAGAA
 10051 AATGAAAATT TGGTCGGGTG ATGGAGAGCC TGGAGTCAC GGTAACCTTT
 10101 GCAGACGCCT AAAACACCAA TATTCATAAT TTTGACATGC AAGCTAGCAA
 10151 CAATTTTACT ACCAAGAAAA TGAGTTTCTT ATGTGCAAGC AGAACTCGAG
 10201 ATCCCCTAAA TAATCACACA CCAAATATT AGCATGATAA AGATAAATAG
 10251 TATAGCTTAC TAAATTTAAT GTGATATGAG CCTGACAGGC AGAATAGAGA
 10301 TGCTTGATAT TAGGTGTGAT AAAAGGTTTG ACATCCAACA TTCACTTACT
 10351 TCGTCTCTG AGACAAAAGT CAGGCACCAA GTGTTTAAAG AAAATTGATG
 10401 GGAGGAAAAG CTTAGAGATG AATAAAGTCT ATTTATTAAT TTATATTTTC
 10451 CTCTGAGAAC TGGGGAGTGT TGTTACCCAT GTTAACGTG GACTAACCTG
 10501 GGCCAGCTCC TGGATTCTAC TGGCTAAGAA TGTTGCTTTA GGCCAAAGGA
 10551 ATTTATCCCT CATGGTGGAA TTTGAGGCCA TATGGGAGGT GATTATGATA
 10601 GATCTGTTTC GGCCTCTACA TTCTTACAAT AACCTGAAAG GAGATTAAAT
 10651 ACATGTTATA GTCATTTAAC CTAGACTCCA GGCAAAATGT CACCCTCTGT
 10701 ACAGTATAGG AGCTTAGGAT AGGAGACCTG GTTTCTAGGG CTGGCGCTGC
 10751 CACTCATTTA GAAAAGGAGG GAGTTGAGTT GTTGGTTGTT GAGATCCCTT
 10801 CCTTCCCTGA TAGTCTTAGA TTGCCTGAGT CCTAATCCAA GCATGATTTA
 10851 CTAGAGGCTG ATTTGGGAAC ATTGCTTCAT TTTCTGTGA CTTGGTATCT
 10901 TCATCTGCAA GATAGGATA ATTACAGCCA TTACTTCTTT GGTTTGTTAT
 10951 GTGGATTACA TAAAGTGATA CATGCAAAGC TCTTAGAAGA ATGCCGGATC
 11001 ATCATGAAGG CTCCATGAGT GGTACCTGCC TTGTGCTGTT CTCACAGTTG
 11051 CAGGAGGCAG CCTGTGAAGT CAGGGTAGCC TCCAGCTCAG CCTCTTGAA
 11101 GCATCTGGTT CACTGTCTGG ATCATCCAGG AAGTGGTCCA TAGCAGAGCA
 11151 CAACCCTCCT GATACTCTGG AAGACTCTTA GTATTCCTAG TTCAGATGTA
 11201 AACACCTAG CGTGCTCTGG TTAACCTAGA GAAAAGACCA GTGAAAGAAC
 11251 ATGGCTTGA ATCACAATAT TTGAGTCTGA GTTAATGTAC CCATTTTATT
 11301 AGCAGTGTAT CATAGTTGAT TTCGGCTGCT TTAATAAAAT TCCATAAACT
 11351 AGATAGATTA TAGACAACAG AAATTTATTT CTCACTGTTC TGGAGGCTGG
 11401 GAGGTCCAAG ATCAAGGCAC TGGTAGATTT GGCATCTGGT GAGGGCCAC
 11451 TTTTCAGCTC ATAGATGGTG CCTTCTTGCT GTGTCCTTAC ACGGTAGAAA
 11501 AAGTAGTGGG TCTTCTTGG GCTTCTTTGA TAACTGCACG AATCCTAATC
 11551 ATGAAGGCTC CATGCCATG ACCTAATTAC CTTCCAAAGG CCCCATCTCC
 11601 TAATAACATT ACCTTTGGGG TTAGGATTTT AACATATGAA TTCTGGGGGG
 11651 ACACATTAG ACCATAACAC TGTGTGAACT TGGCCAAGTC ACCTAACCTT
 11701 TCCTAGCATT AGTTTTCTTT TGGGTAAAAT AAAGATCACA ATAACAACCA
 11751 CTTACAGTT GCTGAGATGA TCAAATGAGA CAAATGTGAA TAACTTCAT
 11801 AAAGTGTAA ATTCCAGACC AACATTTCCC AAAATGTGTT CTGTGAGACA
 11851 TAAGCTAGAC TCATCAGATA CTCTGAGAAG AAAAGTGGTG TCATGGTAAA
 11901 GTCAGTTTGC AGGATGATAC GTGCTCAGTC ATTCTAGAG AGTCATCATG
 11951 CACGTTAGCA TGTTACTGTA TTATTGTGTA ACAAATAACC CCAACATTTA
 12001 GTGGCTTAAA TCAATATAAA CATTTATTAT CTCATAAGTT CTGTGGATCA
 12051 ATAATTACAG GATAGTTTAA TTGGGTGGTC TGACTAGGAG TCTGTCATTG
 12101 ATTGTGGTCA GATGTTGTCC GGGCTGCTGT CATCTGATGG CTTGACTGGG
 12151 GCAGGAGGAT CTGTTTCCAA GATGGTGTGC TCATGTGGCT TGCAAATTGC
 12201 TGCTGGTTGT TGGGGAGAGG GCTCATTTCC TGCCAATGTG GGCCTGTCCA
 12251 TGGGATGCTT ATGTGACTC ATATGTGACA TGGTGGCTGG CTTCCCCAAG
 12301 AACAGTGAT TCAAGAGAGA ACAAGGTGGA ATTGGCAACA CTTTTTATGA
 12351 CTTAACTTCA AAAATCACAT ATTGTTACCA CCACCACGTT CTTTTCATTA
 12401 GACGCCAGTC ACTAAAGTTA GTCCACATCT GGGGAGTGGT GGGGGTGATC
 12451 ACATTACAGT TGGAAGGGAG ACATGTCAA GAATTTGAAG ACATATTGAA
 12501 AAATCACCGT AAGAATTTT TCCTATCATT TATTGAATAG GCACCACGTG
 12551 CTAGGCTAAA TGCTTTGTAG TTATTATCTC ATATAATCCT ATTCATAATC

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12601 CAAAGAAATA GGTGAAATTA TTATCTCTGC TTTCTGAATG AGGAGGCTGA
12651 GGCCTATAGA GCTTAAGTAA CTTGCCCAA GTTACCTAGT CATGCTACGA
12701 CTTGAACCCG AGTCTGTCTG ATTTAAAGCC TGAACCTCTA CCTCTGCCTC
12751 ATATGCCCTCT CTCTGATAAT CCTGTAGTTC AGAAGTCTGT TTAATTTTGT
12801 TTAAGCCTGC ATTTTCTACT TAACCACAGA ATGATGATTC ATTTAACTCC
12851 ATTTTTACCC TTTCATTAC CAACGGCTTG AAACATTATT CTAGAAAGAC
12901 AGTGAGCATG ATGATGATTT ATGTATAATA TGAACATATG GTCTCATAAT
12951 AGATCCCAGC ATACCTATCA GTCCAACTT TTTGTATTAT TCAAATACTG
13001 GAAGTGCTA TTTTGCCTGT CTTGTGTGGG CACCATCTAT GTGTAAATCT
13051 GTAAACATTA ATTTAAAAA AAGACCCCAT AATCCACCCT ATTTTCTCTG
13101 ACTGTGAAAC TAGAGTGGG GTGTGATAAC TCATGGTCCC ACTTCTCTTA
13151 CAGAGTCCCT TTCTTTGCAA TGTCCCTTCT TTTACAGATT CAGTGACTGA
13201 CAACTTAACT TTCTTGGGTA AAGCCAGAAA AAACAGGATG GCCTCCAGGC
13251 CGAGCAGTAG AAATGTGGG GAATGGGGTG TCTGGTGTGT GTCTGGTGTG
13301 TTCCTGCAGT GCCTGCAGGC CATGTGTCTG TATGGTGAAT GAAACGCAAG
13351 TCGGCATCCA GCCAGGATGG CAGGGACCGT GTGCCTGGGG GTGACGGCAA
13401 ACACACAGTG AGAAGCTGCT GATGGAGGGA GGACCGTAG CACTCCTTGT
13451 CATATTTTGA GTAAACATTT TTTTACAATC TTGTGCTTTT TTCTGTACAG
13501 TCTTGAGAAA ATGATTTCCT GGAAGCAGGA TGCATCCAAT GACTTAGAGG
13551 TTCCCATGTT TCCAAACATT ACATGCCTGG CTTATTCCTG AGGCAGTTTT
13601 GTATTCTGAA GGAAGTTTGG GAGCTTCTGT GTTCTGGGCA GAGGCGAGTG
13651 AATATGGTTT CTTTGTAGTA GCACCGTGG CTTGAGAATG ATCAGGAGCT
13701 GGACATTGTT GAATATGTCA CTTACTGCAC AAAATGGCAA AGACAGGGTC
13751 TGGGACAGGG TGAGAGTGTG TTGAATGGAG ATGCCTGGGG CCCCAGTCAC
13801 ATTCAGGAGC CAGCACTGAT GGCATCTGTA ACCATAGTAA CCAAGAGTGG
13851 AAAAAGTCTC AGGATGCCAA GACGCCACTG TGCCCCCTT CTGGTTCTGT
13901 TGTTTTCCCC TCTATTCTTT CATCCAGAAA TTCCCCATC CCTGCCCCCA
13951 ACCACCCTGA CAAGGGACTG ACTTTCAGGG TGGTTTCTAC ACTGGTGATT
14001 TTAACCTCCT ACTAATCAA CACTTCCTGT AGCCCCTTT TCAGTTCTGA
14051 GATCCCAAGG GATTCAATAT GATCCAGACT AAGCCTCATG CACCTAATT
14101 CTTCCGCTTT TCCATTTTTA CTGTGAAAAT TGGTCTAAG TCCTGTAGTA
14151 TACATACTCT AGACTTATTT ACAGCTGGGC ATAACAACGG TGGCTCATGG
14201 CACTCAAAGT TTCCAGTAAC ACTCCTGCAC TCACAGTCTG GTATAGATCA
14251 TGAGATTTTT TTAGATGTGT TTTAAATGAA CAGAGAAAGG CAATGAGGCA
14301 CAGGAAAGAG AGCCGTGGTC TCTTGTGGT AGATGTGGGT TTTGCTACTG
14351 GTTGGAAAGT GAGGTGTGGC ATGGCGCATG AGGGTGGGGA GAGGTGGGTG
14401 ATGCTCAGGT CATGTAGGGC ATAGTAGGTC TTACTTACTA AGGAACCTT
14451 TTTTCTGAG AATAACAGGA ATGTCTTGAT TGATTGAAG TGGGAGGATG
14501 ACACAATCAG ATTTTAAAA GATTATTTAA ATCGCTAATA AATCAAATGA
14551 TGGGTTTCAGC GAATGTTTGC AGAGGATACT TACTGTGTGA CAGGCATAGT
14601 GCTGGCCTTA CCTGGGGTAT CTGTGTATTC TTGTAGGAAT CCTACATAAA
14651 AGCTGTTAAA ATATTTTAA ACAGAAAAAGC TTTTCTTGAC ATCTTTGAAT
14701 TATGACAACC AATTCCAAAC TTCTGGTTGC AAATGGGAGG TGTATCTTAA
14751 AGCAATGGCG ATTGCATTTT CAATTTCTGT TCATTAAAAAT GATATTTTCC
14801 CTGGCTTTGT TACATGACCC TTGATTCTGT GATAATTTGC ATATCTAGAG
14851 TCGATGAATC AATACATGCA AAAGTGTGGT GCGCTCGCTC ATATTCTGTT
14901 ATACTTCAGA CGCCTTTTGG AAGCATGTGG CTCTCAGTTC AGCATAATGC
14951 TCCTGATAAA ATTGCCCCCT CCATACCCGC CGTCACTTTG TTCTGGTGT
15001 GTCCAGAGGT ATTGTAACAT TGGGGTATTT CTCCTTTGAC TCTAATGGGA
15051 CCCCCTGCTA GTTGTGTTCT TGTGGCCTCA GCTTGAAGG CCTCCCAAAA
15101 GCCTGAATTA ATGAAAGCTT CTGATGTGCC GATCCCTTTC TCTGGCAGGG
15151 TGAGAACGCA GTTTCTATAG GAGCGTGAAT GCCTGCTGCT CAGGCAATAA
15201 TCTCTGCATT CAGCCTCAGT ACTAAAGACA GGCAGAGCAG ACAGCCACAG
15251 GGGGTGGGAT TTGAGGAGCC CTATAAAGTC CCTCTCCACA GCTGACACAC
15301 ACCACTCCTT CCCATGACTA TCAGGATGCC TACAATCTTA ACAGTTACTT
15351 TATTCTATGG CTGTTGTCAC TCATCCATCT GGTTATTCCA TAAACACTTA
15401 GCGAGTGAGT CCCTGCAGAA ATGGGGCTAG GCATTGGACA CAGAAAGATG
15451 AAAAAGACCT GAGGCGTGTA CCCAGAGAAG TCACAGCCTA GCCACTGAGA
15501 ACAGGTGCAT CATCAAGTAA TTATGATATA CCATGATAAA TGCATATCAT
15551 TTATATGGTA TATGATATAC CATATGATAT GGGATATGAT ATACCATATG
15601 ATATGGTATA TCATATACCA TATGATATGG TATATGAGAG AGATATGGAT
15651 TAAAACATCA GCTCCAGAAC ACATCTTGT AACATGCGAA TGTAGTTCTT
15701 CAGGGTAACA AACTAATTC CAATTACCCG TGGGTACAGC CAAATTAATA

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15751 GTTCCTATGA GAGAACTGGA CCAAGCAGAG AACAGCAACT AGGGACTGAT
15801 ATGTATTGAT AGGCTGGTGT CAAGTGGGAA GGGGGGAAGT CAGGTGCTGT
15851 GTAGGAGACA GACTGAGAGC TCTGGAGGGC AGGAGTGCCA GGAAGGTCAC
15901 TGAAAGCAAC TTTTCATTGT TGCAAATGTT GTCAGAGGTT GCTCTGCTCA
15951 TGTAAACTC ACTTTATAAA GTGGAAGGAA CTTTAAAGAT ATCCAAGTCC
16001 ATTGAGGCTT CTTAGGCGAA TACTGAATCT AGATTGGTGA AGTGACTTGT
16051 GCTTGCCAG ACAGCAAAAA GAGGACAAAG CATATCTATG AACCCGTAAT
16101 GCTAACCTTC ATTATTCAAC AGTGATGCTT ATGGCAATGC CAACGGGTGT
16151 TGGGGCCTTT TATTAATTTT TAATTTTAGT TTTTATGTT TTTGAGACAA
16201 GATCTTGATT TGTTCGCCGA GCTGGAGTGC AGCGGTGCAA TCACAGCTCA
16251 CTGCAGCCTC GATCTCCTGG GCTCAATCAA TCCTCCCACC TCAGCCTCCT
16301 GAGTAGCTGG GACTATAGGC ATGTGCCCCC AGACTTGCCA AATTTATGCA
16351 TTTTGTAG AGACAGGATT TTGCCATGTT GCCCAGGCTG GTCTCGAACT
16401 CCTGAGCTCA AGCAATCCGC CTACCTTGGC TTCCCAAAGT GCTGGAATTA
16451 CTGGTGTGAG CCACCGTGCC CTGCCTGCTT GAGCCTTTTT GCTATTCTCC
16501 CTCCTATGGG AAAAAGAATC GAGAAAGAGC AGTAGGCTCT ACTAGAGTCT
16551 GGAGCATATC GGTTCGTAGA TTTTCAGATTA AATTCTCTAT GTCTGCAGCA
16601 AGTACAAATG TGAGTGTATA TTCAGCCTCT TGAAGAAGAC ATCTATCCAT
16651 TTCTTCAGTG AATATTGCCC CGGAGTCTTC TTCGTGACAG GCACTGTTGT
16701 AGGCCCTGGA GGTACAGCAA TAAACAAGAC GAAGTCTCTG CCCTCCTGAA
16751 ACTAACCGTT TAGCCAAGGC TTAGCATCTC TCACACTCAG GTCAACTTCT
16801 GCATTTTAGA AATCTGTTTC AGGCACGCAT TTGACAAGTA AAGAGGTTCC
16851 AAAAAATCAT TAATAAGGAT GAAAATGAGG CCATTCTGAT ATTCCATGTC
16901 TTGGCAAAAA TGCTTAATAT GGAATTTAA TATGGAATGG GTGCTGATGC
16951 TGTCAAAGGT GGTGACATTC TGTTAGAAAA TTCAGTGATT TCAAAGAAGG
17001 CCTCAGAGCT GCCTAGTTTG TAATTAGATA TTTTGAAGAA TCTGTGTTAA
17051 TTAGGACTCT GTGGCTGTG CATGTATACT GGGACGAGAC TGGAGTTTGT
17101 GTCTCTCCCA TGATGATGGC ATGTAAATTA ATCTCCAAGG AATTGCAAGA
17151 TGCTGAAATG TGAGGTACTT GAGTACACGT TGCATGAGTG CACACAAGTG
17201 TGCCCTGTGCC GGGATGCGTG TGCACGCGTG CACACACATA CACTCTAGCA
17251 GATAGTAACT TTTTGCTACA CGTGATTTC AAAGTGCTA AATTTACATG
17301 TCTTTTGAGT AGGAGGAAAT TAGGACTTTT GTCTGTTATA TGCCTTGACG
17351 TCTCTTGCCC TTCTCTGGGC TGCTGGGGCA GAATGAGGCC AACAGAGAAC
17401 CACGGATGCC AGTCTGGGTC ACAAGGGCTT AAGGAAGCAG CAGATGGTTG
17451 GACTGACTGG GGTGTCCATT AAGAATCCAG GGGTAGTGAG AGTCTTACCT
17501 GGAGTTTGAG CGCCCACTTC CATTGCCAGG ACTCTCAGCT GAGTGGCTGG
17551 AAGAGACCTG TAGGAGCCAT CCTTCCAGTA TCTATCAGAG GTTTCTGCAC
17601 TGTTTTAAGC TCGTCCTAGT GATCGAGGGA ACCTTGACTG GGGGTGCTGA
17651 TGATTATTAA CAGTGGCCAT ACTCCCACGG CTGCAGGTGG AGATGAAGTG
17701 TTTGATGAGA AGATGAGCAA GAGCTCAGGT GTGCCCCACC AGCTCTGCCA
17751 CTCCCAAGCT GCCGAACCTA GGCCTAATC TACCTCTCTG TGTCTGCTTC
17801 CCAACTTGAG AACCGGAAAT GATAAAAGTA CCTGCTCCCT AGGGAGTAGG
17851 TATGGTTAAA TGAGACCTCT TAAATGAGAC CATGCACACG AAGAGCAGAG
17901 CACAGTGCCT GGCACACAGG AGGCACCTAA TAAACATCAA TGATGCTGCT
17951 GCTGGTAACA CCCATTGCT GAGGGTCTTC AGTGGCTCAG GCACAGTACT
18001 CAGTGCTTAA CATATAATAT GTAATTTATT CTTACAGTA GCCTGAGTCA
18051 CTTGCTTGT CTTCTGGTTA ATATCCTAAT GTTTAGCTCA CCAACTTAGA
18101 TGCTCATGAC TTCCAAAGGA TCTTCATGTA ACAAGGACTC CATATCTATT
18151 TTTAAAAAAT AAGAGCTTAA TTAAGATATA ATTTACATAC CATAAAATTA
18201 CCTATTTAAA ATGTACAATT CAGTGGTTTT TAGTATATTC ACAGAGTTGT
18251 GCAATCATCA TCACTATCTA ATTGTAGAAA ATTTTCATGA CTCCAAAAAG
18301 AACTCCATA TCCATTAGCA GTCCTCCCC ATTTTATCTC TCCCAGTCCC
18351 TGGCAAGCAT GAATTTACTT TCTGTCTCTA TGGAGTTGCC TATTTTGGGC
18401 ATTTTATGTA AATGGCATCA TACAACAGGT AGATATTTGT GTGTGTGTGT
18451 GTGTGTGTGT GTGTGTGTGT GTGATCAGCT TCTTTCACGT AACATAATGC
18501 TTTCAAGGGT TCACTCATGT GGCATCCATA CCTATTTTGA ATGAAGAATG
18551 AAGACAGTCA TCTGAGACAG TTGTATTAGT CCATTTGGAA GATGAGGAAA
18601 CTGAGGCTGA GAGTGTGTAT GTAATTTGCT CATGGCCACC CATCTTGAAA
18651 GCGCTTGAGC TGGGATTTGT GCTCAGGTCC ATCTTGGCTC CAAGGCAAGA
18701 CTTGGCCTT CTCATCCACT CACTGGTCTC TGGTTGGACC TCTGCATCAT
18751 GCTGAACACC ATTTCTATAG AGATGGGTGT GTCCCACTGG GTGTGGACAT
18801 CTTGAGGAAT TGCTGTGGTT GCAAGAACTC TGATATTTTC CATCTACCTT
18851 GAGGGGGATA TGGTTTCATG TCTGTATACT CACATAGTGT TGACCAGTCT

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18901 AATTCTTTTG TCCATTTCCT AAGGGTTATG ATATGAACTT GGAAAGTTAC
18951 AGAAATGAAA GTGATAGGAG AGATATACTT TCTGGGTTGG AAACCCAGCA
19001 ACCAGTCACT CAATATGATG GAGGAAATGT CATCCTTCTT GTGTGTGCTT
19051 CAATAATAGA TTGTAATGAA ACACTATGGT GTCTTAGTTG GCTCCCTCC
19101 TGCCCCGTGC CCCCCTCCCC AGCCCCAGTG CTTTCTGGA GACATGAGAT
19151 GGTGTATCCC TTCTCAGTT GCTGTGATAG CAGTGGGGAT GATGGGGACA
19201 GGTATTCATG GAAGGAAAAG GCATGGTACC AGCAGGCTCT TGGGCAGGGA
19251 TGTGTGTCTT CACTTGATCA TCAGGGAATG AGCTATCATG ATGACAGAGC
19301 ACATCCTATG AAGTACAAAT CTTCCCCCAC ATTTCCCCAA AATTACTTTT
19351 CTCCTGCTCT GTTCTCTCAC ATGCTATTCT AGGGAAAAGG TCCCATTTTA
19401 TCATTAAAAAT GCAAATGAGA TTTCCATCTT GCTTCTACCA AAGAAGGAGG
19451 AAAATAACCT ATATAAACAC CATGAAACCT TACTTTGACT TAAACTAGT
19501 GGAAATTGGC CCCTGAATCA GATAATTAGC TGAAAGTACA TGAACAATTT
19551 AGGCCTCCCG TAGTGGTTAT GTGCTTGTG TATAGGAATT TCGTCTACCA
19601 TGGATTTCAT GGAAGTGGCC CCATTCTGCT TCTGGGTTTA TGTAAGACTT
19651 TCAGCAGCAG CCCAGTCTGA TGTAGCAGAT GTTCCAGTGC CTGTCCCTAT
19701 CCTCCTGCTC GCACCACTTC AGCTCATGCT GGCTCACTTC TGACTGCCAA
19751 CTTGGCATT TTTTTCCTT TTTCTTGACT GAGCCTACTT TGCTGCTCCC
19801 ATGGAAGGCA GGAAGTGTG GGAATTAGT GGACCCAGG AGGAGCCCTC
19851 AACCAATAAC TGATGGAAGA TGGTGCCTAA ACACCCCAAT TCCCTCAGCC
19901 TTGGGTAGGG TAACTCAGGA ATATGGTTA CATGGGGTCC CAGTTTCTC
19951 TGTAGGAAAA ATTCCACTGG GCGACAGCAG TAGCTAGTTA GAAACTTCAC
20001 CTTTTATTG TTTTCTTGGC TGCCTTCCCA GCCCTTCTC TTTTCTCTAA
20051 TTCCCTACTG CGGATTCTT CACTTCCCAA ACAAAACCACT TGTGCTCAAA
20101 TCGTAATTGT AGGATCAGCT TCTGGGGAAA CCCAAATGAA GACATATGGT
20151 AAAGCTTCCC TCTTTTCTTG CTTTCTGCC TTTTGCCCCA ATCAGTTAGC
20201 TTTGATGGTG GGAGTGAGGG GATGCTCAAC CTCTCAGGCA GGCTAATGGC
20251 TCTCAGGAGA CACAATCCAC AGCTGATTGG CAGTTTCTC CCCAAGATAT
20301 CTTCAGAACA AACCTGGTG CTGGTGAGTG ATCCATGCAG CATGAAAAGA
20351 GAGGTGAAG CTTGATGAG CATGTTCCAG TCTCATCAA CTATTTTGTT
20401 TCCATAATTT TCCTTCTCAG AAAAGGGCAG AATCAAGTAC AGTTGATTCT
20451 CATCATTTAT GGTAATTCTT GTGTTTTATA AAGTTGCTGT AAATCCTGAA
20501 TTAGCAAATA GTGAACCGTT GCTTTTAGGG GAAATATACG GTTAGGTTCC
20551 TGTGAGCCTC TAGTCACAAC ATTTTCTTCT TCTTCTCTT CTTTTTTTTT
20601 TCGAGCTTAG GGTCTTGTT TATCACCCAG GTGGGAGTGC AGTGGCGCGA
20651 TCTTGGCTCA CTGCAACCTC CACATCCCAG GTTCAAGCGA TTCTCCCACT
20701 TCAGCCTACC GAGTAGCTGG GACTACAGGC ATGCACCACC ATATCCGGCT
20751 AACTTTTGTA TTTTTTGTA GAGGTGGGGT TTCACCACAT TGGCCAGGCT
20801 TGTCTCAAAC TCCTGACGTC AGGTGATCTG CCTGCCTCGG CCTCCCAAAG
20851 TGCTAGGATT ATAGGCATGA GCCATCACAC CTGGTCAGGT CACATTTTCA
20901 TCAACTAAAT ACATAACCTT GTTGTATGTG TGTTTCTGTT TAAAGACATC
20951 TTATTTTATA TATACTGTTG ATTTGTTAGC ATTGAACTCA CAGCCACAGC
21001 ACTGTGACTC ATTTCTGAAC AAAGTTATCT AACACACATA TTTTCTCCAT
21051 AAGGCACCTC GCATCTTGCA CTTAGGAACA CTGGATAGCA CTTCAGCATT
21101 GCACTTGGGG GTGATTTTAA ACAGTGCAAA CACTAACAAA AAAGCACAAA
21151 ATGTGAAAAA CATGGCACTA AATAGATCAC AGAATGGACA CTAGCTTACA
21201 GCATGAGCGC TCGAACAGA AGGCAGAGCG CTGCCTTGTT CAACCTCAGC
21251 TGAGGACATG TGCATCGGGT GACTCAAACCT TTTTCACTG CTGTGTGCAT
21301 GACTGCGAAT GACTGCAGAA CACCATGAAT ATTGATTGA TTTCGGGGTT
21351 ACAAATAAAT TTTAACACGT AGAAGAATTT GCAAATATAT ATTCAGTGAA
21401 TAATGAGGGT CAGTTGTCTT TCTTACTTCA TTACAATAAG ACTCTACTTC
21451 AATTCAGTAT TTTTATTTC TTTTATTTT TTTTGTAGAG ATAGGGTCTT
21501 GCTCTGTAC CCAGGCTGGA GTGCAGTGGT GTGATCCTAG CTCACTGCAG
21551 CCTCAAACCT CTGGGCTCAA GTGATCCTCC CGCCCCAGCC TCCCAAATAG
21601 CTAGGACTAC AGGAACATGC CACCACACCT GGCTAATTTA TTTATTTTTT
21651 TGTGGAGACG GCCTCCCTAT GTTGCCAGG CTGGTCTCCA ACTCCTGTTT
21701 TCAAGCCATC CCCCCTTCTA CTCTCCCAA GTACAATTTA GTATATTTAT
21751 TAAACGTGTG TTCCAGGCTT TTTGATTGCT ATTGAGATGC TAATGAGATG
21801 GTCCCTGTCA TTAAAGAGCG TCCATTCTGG TGGCACAAGG AACTCAAATT
21851 ATGACACAAG ACAGAAATACC TACTCCAGAA GAGAGTTCTG TGAAAGCGTG
21901 AAGGAGGGAC TTGAGTGTGC GATTACAGGAA GGACTTCACA TTGGAGGGAG
21951 TTTTTTTAGA TAGGCTTGA GAAACATTTT ACATTTTGAA CACCTCATAC
22001 ATCATTGATA AAAAAAGAA GCAATTGGTC GAAACAACTT CATTTCCTCA

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22051 GATCAAGTCT TCTAGGTTAC CTGCATCTGC ACCCACCAGT CCCACCTTGA
22101 TTCCTCTCTA GATGAAGGGC GTCTTTTCCT ACCTAAGGCC GTCCCTTCTG
22151 CTTATGCTGG GGACTCCTTT GCTCTTTGGG GCATCCTCTC TTCTCCTGGG
22201 GAATTGATCT CTCCCTCTCT ACTTGAATAT TCCTACTAGT GTATACATGG
22251 GCTTCCGTGT CATCCCCCTT GATCCCGCAT TGCCGCCAGC CACCCCTCAT
22301 TCCTTTTAGGC CTTTCACAGC AAAATTGCTG GAAAGGGTGG TCTGAAGTCA
22351 CCATCACTAC TTCCTCCCCT CACATTCTTT CCAAGCCACC ACCACTTTAT
22401 GGGGGCTGCT CTTTGGAGG CCACCTATGG ACATTGCATC ACCTTTCTGT
22451 CCTTTTATCT TAAGTACCAG TTAGGATGCT TTCAGTGCC TGTTGCAGAA
22501 TGTCCTGATA CAAGTGACTT ACACAATACG GACATTGACT GTTAAGAGAG
22551 TTACGTTCTC ACTGAACAAG GATGTTCCAG GCTTGGCTTG GGTGTTTCAT
22601 AACACCTTCA AGGACCCAGA CTTCAGTTTC CTGCCCTGCC TCTCTTGATC
22651 ACATCAGCAG ATATTATGTC GTCTAAAAAC AGGGAAGGGA GTGAAGTAGC
22701 CTCTGTGTTT TTCTTTTAT CATGGAGGAT GTTTTTTTTG CCCTGCAAGC
22751 CCCATGCACA TTTCTTAAAT ATCACCCCT AAATCATCC CTGGCAAAGG
22801 GGGATGGTAT TATCCTTATT GGCTTGGACC AATTAAGATT CATCCCCTGA
22851 GTCTGTGAAT GGGACGCATC TTCTTTGAAA TGTGTGCTATT TAACCAAAAT
22901 TGGATCTGTT AAAGGAAGGG GGAGCGCCTA AGGTGAAAGT GCCAGGCAGT
22951 GTCTGCCACA TTTTCCCTGA CCCTTCCTAG CAATTTTGAC AGCCAGCCAC
23001 CCCATCCTTC TTGAAGCACT TCATTTCCAT CACATGCTTT GTGACATCAT
23051 TTCCTCTGGG TTTTATTTAT TTATTTATTT TTTTATTTAT TTGAGACAAA
23101 ATCTCTCTCT GTTGCCCAAG CTGGAGTGCA GTGGCACGAT CTCAATTAC
23151 TGCAACCTCT GCCTCCCGGG TTCAAGTGAT TTTCTGCCT CAGCCTCCCA
23201 AGTAGCTGGG ATAACAGGCA TGTGCCACCA CACCTAGCTA ATTTTGTAT
23251 TTTTAGTAGA GACAGGTTT CACCATGTTG GCCAGACTGG TCTTGAACCTC
23301 CTGACCTCAG GTGATCCACC CGCCTCGGCC TCCCAAAGTG CTGGGATTAC
23351 AGTCATAAGC CACCGCGCCT GGCCGCTCTG GGTTTTCTTT TAACTTTCT
23401 GGCCACTCCT GTTTCCTGTT GACTCCTTTC TCATTGCTCT ACCTCTAATT
23451 GGTGGAATGC CCAAATAGTT AGACCTGAGG TCCTTCTTGT CAGGATCTGT
23501 AGTTTCTCCT GAGTGATCTC AGCAGTCCCT TTGTATCATC TATATGCCGA
23551 GTATATCCTA AACTTGCTTC TCTCAAGAGT TTGTCATCTC ATTGAATGAG
23601 TTTCCCATCT CATTGATGGG CACCGCCATC TATCTGTATA GTTGCTTAAA
23651 GTACGGGCAT GTTGATGAG TCCTCTGTTT CCCACCCCTG CCATTTTGTT
23701 CTCCACTCAC CAGCAAGTCC TGCCTGATAC GATATCTAGA ACACATCCAG
23751 AATCTGTTTG TTTCTCTCCA TTTCTGCTCC TGCCACCCTC ATTCCACGCA
23801 TCTTCTCTG TGGAGAGCTG ACAGCCTTTT TATCGGCCTC CTTTCTTCTA
23851 CCCTTGCTCC CAATGAATTGA TCCTCCGTGG AACAGCCACA ATGATCTTTT
23901 AAAAATATGA ATCTGATTTT TCTTGACCCG CAGCTTAAAA TTCTCTATCG
23951 GTTCTCTTT CCACTCGGCA TAAAATCTGC TTTCTGGTGC TGGCCTGCAG
24001 CACCCTGAGT GCTGGCTGTG CTGACCTCCT TTCCAAGGCT GGTCTTGAGC
24051 CGTCTTCTC TAACCTATGC TGCATTCTT TCTGCTTCC TTGAATAAAA
24101 CAAGCTCTC CTGATCTGAG GGCCTTTACG GGACCTCTTT TTTTTTTTTT
24151 TCTCCTAGGA TTATCTTCTG CCAATTTTC ATAGGACTGG CTTCTCCTCG
24201 CCTCTGAAAT CTCAGTCCAA ATGTCATGTC CTCCAAGAAT CTTTCTCTAA
24251 CCGCCCACTC CTGCTGGGCA CCCTCTGTTG TAGCATACTG TTAGGAGTCT
24301 CTGCATCATG CCTCTAACTC TTTGAAAAAA AGTTCTATTT GTTAGTTTAA
24351 TAAACTAAAA CTAAAAAATT TATAAACCAA ATTTCAAAAT TTTAAAAATT
24401 AATAAACTAA AAACAGTACA ATGATATCTC TGTGAAGTCA AGGGAGGAGA
24451 GAGTTTTAAG AAGGGGAAGT TAATTAGCAG CACTAAAGGC TCTACAACGA
24501 CTCAAGATAA TGATAATGAT GATGATGATG ATGGTGATAA TGACAGTGAT
24551 AACTAACATT TATTGTTACT ATGAACCTGG AAGAGTGCCA GGCATTTTGC
24601 GTACATTATC ATATTTAATT CTGACAGATT AAAAGTCTG ACAATGCCTC
24651 TACTGTCAAG GAATGTTATT CTCATTCTCA GAACACTGAG ACTTAGGGAG
24701 GTCAGTCAAA GTGCCTGGCA CATGGTAGCT TTCGATTAAT GTTTGCTATG
24751 TGAGTAAATA AATTCCACA AGGTCTCGGA GCTGGTGAAT GGTAGAGTTG
24801 AGAGTCTAAC TTGATCTGAG CCGAATCCAA AGTCCGTATT TGTAACCACT
24851 GGTCTATATT TGCTCAGATG AAGACAGAGA ACCCCTTAAC AGATTGAGAA
24901 AAGGAAGCCT AATATAGGAT AAATGATTTT TTATTTATTT AAAACATGAT
24951 AAATAAAATT AATTTTCAGT CCAAAACCTT CTGAATTTTG GAATTCTGGA
25001 CTCCATTCAAT TCAATTCAAT TGAAGGCATA GGTGAGTTCT TTAAGAAG
25051 CATTAGGAAT GAATCCAGAT TGAACAATTT TCTTATTTAA ATACCTAAA
25101 GATGCATTCT TATGATGAGC CAGGTTTCAT GTCCAGGAAA GCTATTAAAA
25151 CTCAGTCTTT GTGATGAGTG CAGTAAGAAC CCCACTGAA TTACGTAGTG

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25201 AGCAGGTGCT TCCTAAACCA AGTTTCATGT TTGACAAGCT AGGAGAGAAC
25251 CCAGTGTTAA ATGTTTTCTG GCATGTTGGC CTTTGGTTTC TCATATTATG
25301 GGACATATGT TTAGTGCTTG TGGTATATGC TTAGCCTACT CTTGTAGGAT
25351 GACTGAGACC TCACACAACA TCAAGGACAT AGTCCTTGCC TTTGCTGAGT
25401 TCAGAGTGTA ATTGGAGTGA TGAAACATAC ATGTGAATAA ATGCAAAGTC
25451 ACAAGTAAAG ACAGTTAATG TGATTGATGA AGGACGTGTG GCACAAGATG
25501 GATAAGAATG AGAAGTAGAA GAAGTAGGTG GTTTTGAACT TTCGTTACTC
25551 AGGGAAGGGA ATGTATGTGG ATTGGTGGAG AAGAGAGGGG AGGAAGATGG
25601 TTTTAAGCAC TGGTAAGATG GTGCATATTT GCAAGTTTTC CTCAAGGGAT
25651 AGAAAGGGCT GAGACCCAGT GGGGAGGAAT CAGAGGGGAA TCGGCAAAGA
25701 GAATTAGGGA AATGAGAACT GTCAGTAGAG GAAGTGAGAT TAGGCTGGCC
25751 GGGAGCTATT TGGGGTTTCT GAGTACTGAT GTTACATGAA GGAATATTTG
25801 TGAGGGATAA ATATTGCAGT GGGTGCATTT GAGAGCAAAA CCAGATTCAG
25851 GCCCAGTTAG GGAAGGTTT CTTAAACGTC GGCCTTTCCT ATGCCATCTT
25901 CACTTTTAA TTTTTTGGTG GCCATATTTA GATATCAGCT GTGTCACTAT
25951 ATACTTAATA TTTTCTGTAA GTTGATTTC CTTTTAAAAA CTTAAATTTA
26001 GCTTTGCCCT ATGCAATAAA CTTATCATTG TTTACTGAAT GCTTTTCTTT
26051 AAATTTAACC CCTTAAATCT TAAATAAATG TAGCCTTACC CCAAGCACTA
26101 GTACCTATGA AATCATAGGT ATTCTGTGCT AGTTCATTTT TTCCAAATGC
26151 ACAGTAAATT AAACCTGCGG CCATTAAAAA AATGTTGCAT ATGTGTGTTA
26201 CCTAATGCTG TCTTGTGTAC CTATGGTTCA TGTGCTACAC TTTTGGGAAT
26251 ACCCAAGGCA CTGTTACAGC TTTCTAACTG TGACATGATG AAACGTAATA
26301 AATAGGAGCC AGCTACATTT ATTAGATACT TACTGTGTG AAGCCCTTGT
26351 GATGGAGGAG ATGAACATAT GATGCAGTCC TTA CTCTTAA TAGATTGGA
26401 ACAAAGCAGA GAGAGAATGG CACACCAATG AGAAAGTGAG ATGTAGGCCT
26451 GACAGGTCCA ATCTCTGCCA TGTAAGCAG CTTTTAGATA AGCCATCTGA
26501 TATCAGCTCT GCCACTGGTC AGCTGAGTGA GCTGCCACTC TGGAACCCAA
26551 GGGTAAGCTC TCCTCAAATT CAGTTCACCT CAACAAGTAT TTGCCAGATA
26601 CTATATGACA CTTTTGCAGA TATTAAGGAA ATTAAAGTGT CTTAGGGAGT
26651 GTTAAACCAG AAACCAAAGT ATGAAGTGGG AGACAGAGTG GAATAAGGAC
26701 TGTAAGAGAG ATGCAATGAC ATGTATTCGG TACTTACGGG AGGAAGAGTT
26751 TATAGCCAGC TTTGGGGACC AGGGAAGGCT TCCTAGAAGA TGTGTCATTT
26801 CAGATGAACT TAAAAGATG GGATCATAA AAAGGCAGTG ATGGAGGGTG
26851 TTCAGCAGAG GGAAGGGCAT CATCATGACA ACAGAGAGGG AAACGAGGC
26901 ACCTGTGAGG AGAAGAGCAA GTCTCCGTTG TTTGGTGGTG ATGTTGGGGG
26951 CATGAAGGTG GAAAGGAAGG TTGGGGTCTT ATGGATACCT TACATGCTAG
27001 GTTGAACATG GATTTATTT CACAGATGAT CAGGAGCCAT GGAAGGCTAC
27051 ACTAGCTGGG CGTACATAAT TTAAGTCAGA GGGACAAATA ACTGCAAGCT
27101 AAATACTCTT AGGGAGAAAC TGCAGCAATC TGGGTGAGAA ACAATGAATT
27151 TGTGAGTAGT CACCATAGCA AAGGTCTGGG CTAGGGGGGC ACTGGAGGAG
27201 TGAAAAAGAA AGGTTTAAAT AGTCACTGAG AGGGCTGAGG ACCCACTAGC
27251 CACTGGCATA GTGGAGTCAA TCATTTCTCC GAAATTACGA GGAGGAGAGG
27301 TGGGGCATCT TGAAGCGTG GAGCAGTGGA GGATGGTAT TGTATGGTAG
27351 GGGAAAGAAG ATAATGATCG CAGTTCAGT AGGTGATGGA TGAGGAGGGG
27401 AAGGCGTTTT ACAGATTATT CACTGGGAAA GAACAGAGGC AGTCCACACT
27451 GTAGTTAATT CTTTTATTT TTGTCTTTAA GTATACTCAA GGATAAATAG
27501 CCATACAATT TCTGTTTGGC TTTTCATGCT GGAGAGGTGC AGAGGTTGCA
27551 CTGAACGTGG ACGATATTAA TTTTGACTTG TACAAGGGTA CTGTGTCCTG
27601 GGAACGTGCC AATAATATTC TATGAAAAGT CATTTGAGTA ACTCATTTTT
27651 ATACATAAAA TAGGTAGTTC CTTTTCAATT TCCTTATATT TTGGGATACT
27701 TACATGCCAG GATTCCTCTA TTTCAATCTC TTGTTTTCTA CCTGAAAAGA
27751 TCTTACGGTT GGTGGCTGTG GATGCAATTC TGCCTTTACA CAGAAATGAC
27801 TCTCCTGGGC ATACCTTTAG GCAAAGAGCA GATGAACGCA TAACGAGCAG
27851 CTTTGAGATT TGGTATTTCC ACTGCAGAAC GAAGAGAAGG GTGGCCCACT
27901 GGAAATTTCC TCAGAGAAAC GTCTAAGTCT GCATCTCCCA CATCCATTCA
27951 TTTTCATGCA TAGTTCTTTC ATCTGTTGTT TTTTAATTTA TCTATTTTAT
28001 ATAATGTCTA TCTCTGTAGT ACCTGGGATG AAATGCGCCA ATCCTGACTG
28051 CAATGAATAG GGCAAAGCAA TTCTTGGGAG CTGCTCTGGG CAGGAAGTGG
28101 AGGCTGAATT CTTTTAAAGG AAAATTTTTT GGGGATCGTG ACTCACTGGC
28151 CTTTCATCCCC ATCATCACTG GGATTGGTTA AGTGCCAGGA AACAGCTGGA
28201 AGTCGACAGA CAATTTAGGG TACAAATGAA AGGAGAAGTT ACTGTTAAAG
28251 GGATCTGTAT TCTCTGTTAT CAAAACCACC AACGCTGTCT CCTAGCTAAT
28301 AGGAACCAAA ACTGTGCCCT GAGAATGCTG CCAGATGTTT CTCAATAGGC

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28351 ACGTTACGTT TTATGGTCCT GGATGCTGCA CTTAAAAATA GTGTCCAATT
28401 TCAAACAC TATTAAGTAG AACTAAACT TTTGGAATCT ATTAATGGAT
28451 CTAGATCTCC AACCTAGTGG CAACAAATGT TTGAAGTGAA GTTTATTGTT
28501 TTAAGTGAAT TTTAAATGTG AAATGATGAG TATTTAACTT CAATTTTTTT
28551 GCATGATTTT TCCACTGTGG CAACTTTCCT TTTAAATGA TAGAACCTCA
28601 TTATAATGTG GCTGATAGGA AATCTGTTA TTCATGCATA TATTTATCA
28651 TTTACAAATA TTTATTACT ACCTACCAGG CTCTGTGCAG TACTCCGATA
28701 AACTGGAACA AGAGCCATAT TTTGTACTTT GTATGTTTCT CCAAGAGAAA
28751 TGTTCTATTG TACTACATTA ATTCTTAGAT GCATTTTGA ATTATTTACC
28801 CTTCTGAAAT CAGAATGTGT CTTACTAGCA ATATGTCATA ATTTAATGG
28851 CAATTTAAAT TTTCAAGAGG CACATAAGAT AATGATGTGT TTTGTAATTG
28901 ACAATGTCTT GATTTGATAG AAGATATTTG TACAATACTA TATTGGTACC
28951 ATGCTTTGGC CGATGTAATG GTCCTATTG GAGTTCAC TAATGTTAA
29001 GCCTCTAGTT TTAGGCGTTG ATGTTGGTCC AGGGACACTA GGACTCAAAT
29051 GCCCAGATGT CCAGGTCTAA GAGAGAAGAA TCAGAAGGTG AATGCAGAGC
29101 CCAGTGGGTT CAAGCCATGT AGACAATAAT AGCAGAATGG AGAGACATTT
29151 TCCGATGCCCT CATGCTATG CATCTTCTCT CCCTTCTGG CCTGCCACAT
29201 AAATTCATTG CAGTGCAACT CTGCCAGATA TCAGAATAGA GCAGGAGGAA
29251 AGAGAAACAG CTGCAGCATG GGAGATAGGA CTCATACCAA GAGAGATTAG
29301 GCTCGGTGTG TATACCTAAT GATGGTAAAG TGAACAACCA GGTTACAGTG
29351 ATAGCAGCAA CACGCATTTA TCGAGTGTC TATCCACTTC AGAAACACTA
29401 TTTTAAATG ATAACAATTC TACAAGATAA GTATTCATTG ATCATCAATA
29451 TTATCCTTGT TTCATGTGTA AAACCTGGGC TCAGAGAGGG TAAAAACTT
29501 GTCCAAGCTT ATACAGTTAG GAAATGGTAG AACCAGGATT CAGGCTTGC
29551 TCCATGGGCG ATCAAGGTCT GCTCCACTTC CAGTGTGCCA TGCAGTTCC
29601 CCAAATCTGA GAACATGCAT TTTACTTTATG TCCGGTTATG TGAGGTCTCA
29651 GAAGCCAGAC AGGGCCAGAG TATGAAGAGT TACATAAAAG AGCTTCAGAA
29701 TCTAATAGGG TTCCTGAGCA AGATTCTACC AATACCTGGA ATAACCTCCT
29751 CTGTGTATAG CCCAGGTGCA TGGACTAGAC CAGATTGGGA GGGGATGGTT
29801 GCCCAGCAGG CCGAGAGAAG GAGCTGGTAG CATGGTGAGT TAAGGGCTGA
29851 GGATCAAGAA TTTGTTAGTT TAATTAGACC CCCCAGAG CAGAAGTGCT
29901 GTTGTAGTTA AGACTCTGGA ACTCAGTGAT AGGATATTTT AATAAAGCCC
29951 ATGATCTCAA GAGGAACCTG CTGAATGGAT GAGCTCACAG TCCATAGTTG
30001 GGAGCTAATG AACAACCTTA ATTATGTTTC TGATACTAGT GGAGGTGTTT
30051 TCCTGTCAAT GAATTCCTTT TAGATTTTGA CCCCATGTAG ATCTCAAGGA
30101 AATAAATAA TAAATAAAT AGTTAATTAA TTTATTTATT TTGAGATGGA
30151 GTCTAGCTCT GTCGCTCATG CTGGAGTACA ATGGCACGAT CCGGCCAC
30201 TGCAACCTCT GCCTCCCTGG TTCAAGCAAT TCTCCTGCCT CAGCCTCCCG
30251 AGTAGCTGGG ACTACAGGTG CCGGCCACCA CGCCTGGCTA GTTTTTGTAT
30301 TTTTAGTAGA GATGGGGTTT CACCATGTTG GCCAGGCTGG TCTCAAACCTC
30351 CTGACCTCAG GTGATCTGCC TGCCTCGGCC TCCCAAATG CTGGGATTAT
30401 AGGTGAGCCA CCATCTCAAG GAAATTTAAA ATGTTTGGGT TTGCTACTGA
30451 AGAGCCAGA AGAATTTTGC AAATTATGAG AAAGAGCCCA AGCTTTCAA
30501 TGTCCAAGGT GGCTATTCAT ATCTGGGAAC TAGGAAGAAT TCCAAGTTGT
30551 TCACCTATGC CTGTTTCTAA TGCCTTCCCA CAAGGGTGAC AGAGCAAAGT
30601 TGATTTCTAT TAATTTAGGG GAAATAATCT CCACTGAATG GCCAGAACAA
30651 TAACCTTTCT AATGACACAC AGAACAACGC TACTGTCACC CTTGTCACGG
30701 CTGTACTTGT CATCATAGGT ATTTATTAGG TACTTAAATA CTTGTTTGGC
30751 TCAAGATAGC TCACAAAGAG GGTCAATAAG TCTCGTTTTC TGTCTTTTAG
30801 AGTTTCCAGT ATAAGAACAA ATAGATGAGC AAACACATAT AAGAAATACA
30851 TTGAAGAGAA TTAGAATATT CATGAATGTA CAGTGAGAAA TTCTTAACCT
30901 ATACAGGGTC ATAGTTGACT TCATTTAAAT ATTTTCTAAG GGTAGAACGC
30951 AACATTATTA GAATACCTGA GAGGGGAAGG TTGGGACCGT GCCCTTGAAG
31001 TAGCATATTA AATTTAAGAG AGGAAAGAGA AAGCTGGCAA TATTTCAAGT
31051 CTGGAACCTGA TCCTTAAGGC AATACTTTGC TGCTGGAATT TGTATTTTAA
31101 AGACCGCCA GAATCTCTTG TGGTCCTTTG CCCATGTAGC CCTATGAGGA
31151 CGTTTGATATA TTTGGATTGT TTAGGCCCTG AGTGTCTAGG GCATAGGCAG
31201 AGTCATTGGA TCAACCCATG TATCTGTTGC TTGACACATT GCTCTGGATA
31251 CATTGTACCC AAGAAATCAG CCCAAGTGGG ATCCAGCCCA AAAGAGAATT
31301 GTTGATTTTC AAAACTGAAC AGTCCAGGCA AAGCTCAATC TAGGGCTCAG
31351 ATCATGCATC CAGGACTGCA TAGTCTTCTA TTTCTTGATT CGTCTTCTTT
31401 GCATTGCTCT ATTCTTAGGC AAGTTCCATC TTGGAAATCC TAAGGTGGCT
31451 GCCGAAGGCT GCAGACCTC CTCTGTCTTC CAGATTTACA TCCTTCAGGA

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31501 GAGCGAAAGC TCAGTTCCCT AAGGCTGAAA CAAAAGTCTT GCAATGGCAT
31551 CTTTTTGGTC CTGATTGGCC TGTCTAGGGT CAGATACTCA TTCTTTAATT
31601 ATCATGGTGG TGATTGGGGG AATCGAATGT GCTAATTGGC TTTGCCCTGGG
31651 TTGTGTGCTT CACTCATGGA ACCTAAGAGA GAAGCCAGT GAAGCCCAAC
31701 TCAAGGGCTG AGAGTGGGCT GTAGTGGTTT CCCTAAACAA AATCGTACT
31751 GTTGACATAA TATGGCATGG TCATGGATGC TGAGAGAATG ATGTAGAGAA
31801 AGGGTGGATG AGAATGGAAG CAGGACTAGG CACAGTGGT CACACTTGTA
31851 ACTTCAGCTA CTTGGGAGGC TGAGGCAGGA GGATCGCTTG TGGCCAGGAG
31901 TTAGTGACCA GCCTGAGCAA CATAGTGAGA CCCTATCTCT AAAAAAATTT
31951 ATTTTTAAAT TAGCCAAGTG TGGTGGTGCA TGCCTATAGT CCCAGCTGCT
32001 TGGGAGACTG AGGTAGGAGG ATCGCTTCAG CCCAGGAGTT CAAAGTTACG
32051 GTGAGCTATG ATTGCACCAC TGCACACTAG CCTGGGTAAA CAGAGCAAGA
32101 CTCTGTCCAT AAAAAAGAAG AAGGAGGAGG AGAAGGAGGC TAAGAAGAAA
32151 GGAAGTGGGT ATGCTAGTTT GGAGGTATTG AAGTCCAGGC AAAGAATCAT
32201 GGTGGCTTGG ACAAGCAGAG TGACTGCTGA GATGGAGAGT GGTGGATGGG
32251 TTTGATTCT AGTTTGAGA TGAATCCAC AGCATTGCT GATGAAATAC
32301 ATGTTGAAGA TGGTAAGGAA AATAATTAAA AATGATTCCCT AGGCTTGTGG
32351 ACTGAGTAAC TTGGGAGGAT GGTGGTAGCA TTTCTTGAGA TAGGTAAGAA
32401 TGGAGGTTT TTATTATTTT AAAATCAACT ATGCTATTCT AGCTCTGTGG
32451 GATTTGAGAA GCCTGTTAAT ATCTGAGTGG GAATGTCAAT TGGACAGTTG
32501 GAGACAGGAG TCTGGAATTT AGAGGGTAGA GCTGGAATA TATATTCATG
32551 GATATATGAA TCCATAATGA GAAGGGGTGG CTATAGCAGT TTTTATTTTT
32601 ACTTTTAAAG CCATTTAACT AGTTTATTA ATTGGCGGGC CTTCTTGAGA
32651 GTACAAACCA TAAATCACTT CATTTATCTT CAACTCCTAC CTTCACTCTT
32701 GCCCTGTGAG GCCAACCTG GATGATACAC CAGAAATACC TCACAGCTTT
32751 TCCAGGCACT TTAATAATCA AATCAAGTAA AATAGAAATA AAAATTGTAC
32801 TTTTTTTTTC AGATATTCAA AAGTCCAGTT TTACATGAAT CAAAACATCA
32851 ACCTCTCATC CAATTCAAAG CTCTCTTTCA GCCGGGTGAG GTAGCTTGTG
32901 CCTGTAATCC CAGCACTTAT GGGAGGCCG GGCAGGCCAT CGCTTGAGCC
32951 CAGGAGCTTG AGACCAGCCT GGTGAAACCC TGTCTCTACT GAAAATACAA
33001 AAAC TAGCTG GCGTGGTGG TGTGTGCCTG TAGTCCCAGC TACTCGGGAG
33051 GCTGAGGCAC AAGAGTCGCT TGAACAAGTG GGGAGGACTT TGCAGTGAGC
33101 AGAGATCGTG CCACTGCACC CCAGCCTGGG TGACAGAGCC AGTCCCTGTC
33151 CAAAACAAAA CCAAACAAAA AAACCTGTAA TCCCAGCACT CTGGGAGGCC
33201 GAGGTGGGTA CATCACCTGA GGTCCGGCAGT TCAAGACCTG CCTGGCCAAA
33251 ATGGTAAAAA CCCGTCCTA CTGAAAATAC AAAAAATTGG CTGGGCATTG
33301 TGGCGGGTGC CTATAATCCC AGATATTTCAG GATGCTGAGG CAGGAGAATT
33351 GCTTGAACCC GGGAGGCAGA GTTTATATTG AGCCGAGATC GCGCCATTGC
33401 ACTCCAGCCT GGGTGACAGA GGGAGACTCC ATCTCAAACA ACAACAGCAA
33451 CAACAACAAA ACAAAATCAC AAAGCTCTCC TTTCCCTGTA GGCCAGGCCT
33501 GGCCTGAGAC ACTGCAGATC AGCCATGGGA AAGGGAAGGC GGGGGCCGTG
33551 GCTGTTCCTT TTCCCTCCTT GTGCACACTC CTTTCTGCTG GGCTTTGCTG
33601 CTTTTGGCTC CACCACAGTC AAGGGGCAGG GAGAAGGTGA CTAGAAAGCA
33651 AGGGTGT TTT ACTTAGCTGG TGCTTCTTAT GGTTCCTTCT AGTCATGAAA
33701 TAGTCTCTGT CTTGCAGGTG TCCAGCTTTT GTGAGTTCTT CGCCACCCTG
33751 TGAAGACCCC CAGACTTTCC TCTACAGACA TGGATGATGC CCTCCCTGGC
33801 TGGTCTCTTA TGACACCCCC GGCCTCTCAG CTTCTGCCTT GAGTGTACCC
33851 TGAAC TTTT TTCTCAAGTG GATGGACTTC TTGGGGAAGG CTTTTTCTG
33901 AAGGCTTTGA TGTAGCTTCT GACCCCATCC AGTGCCTACT TGGCCCAGGA
33951 GAAACCATTA GGCATCTTTG TGCTGCCATA TATGGGGAAA GCACGTGACT
34001 CCACTGTTGC CTACCCTCCT CAGCCTGCAT TACAGGCCAA ACGCTGCGCA
34051 CCCATGTCTG ATTTTCCCAG GGCCGTCTCA TTGCACACCT CCAGAGGGCA
34101 TCATTACAT GTGTTCTCCT AGAATTGCAC AGTTAATGTG GCAGCCCTGA
34151 GTTCAGACAA ATCTCTCATG CCCCTACCTG TAGCAGTGCA TTCTATGAAG
34201 TATGCAGTTC AGCAGGCACC CAGCTGGGGT TCCAGATGCT GAGACCCCTT
34251 TCTGCCAACC CCTGTATCT CTGAGCAGTT CTCTTTCTGC TCCTTCATTT
34301 GCCATAGTGC TGCAATGCTA TGTGTTCTTT TCTGCTAAGA AATGCTTTTT
34351 CTCCAGCGAA TTCTCTTATA TGGCTTAGAG ATCATATGCA AGCTCTGCAT
34401 TGATGGATCC TCAGTCTTCA GTTTTGTAGAG ATCTCAGTAT AAACCCCAAG
34451 ACAACAGGAA AGGGCTCACT TAACATTGCC TTGTAACAGA GAAACCCTCT
34501 CTTTGAATGA AAGCTGTCTG GGAAGCTCAG TATATAAAGC AGGTGACATG
34551 GTGCTCCATT GGGGTGGTGG GGAACGAGGG GCGGGGTGCT CAAGGCTGGC
34601 TTCTGTGCAC AGTTAGAAAA CTCCTGTGCC TGAGAAAGCC AACCCTGGTT

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34651 TCCACGACCA GGAGTTTCCC ACTATTTACA GTTCTGCAGT GTTTGGCTTC
34701 TTCATGATTT TCTGCTGGTG AAAGCAATAG TTTGTACAAG ACGTGTGGGA
34751 ATAAAAATAG TCCAGGTGCT GCCCTTTTCC GCGGCAGAGG GACCACCTGT
34801 CAGGCTGCCC TAGTGGGCCT CTTCCCACAG CACGGTTCTG CCACTTGAAT
34851 ACCTCCCTGC CTGTTTCTCG ACGCTGACCT AGAAGCTTCT GGTGAATGCT
34901 TTGCTTCTGC ACAACTTGCA TGGTGGGTGC CTTTTTTTTG TGAATGAAAA
34951 GGTCTTCCCTC TGGCTCTGAA TATAGCAACT GCATGACCTG CAGAAATAAT
35001 TTTGTTGTTT CTTGTGGGCC ATGTTAGCTT AGGGCTTTGT ACCTTATAGG
35051 GACATTGGCA AGAATTTTCT CAAAAGGTTT TCATCTGTAA ATTTTCATCT
35101 TTGCACATAG TAGAGAGCTT AGAACGTCAG TCTCGTTCCA TCTGTTATAA
35151 GTTTTGTAGGC TTTGGGCAAA GTACCTAACT TCCCTGTGCC TCGATTCTC
35201 CATCTGTAACT ACTGGAGCAA GAGTAGAACC TCCATCCTGG TCTGCGGTGA
35251 GGCTTAGTGA GGGCATTCTG GTGAAATGTA CACAGTGCCT GGCACAGAGC
35301 AAGCACCCAG AACATGTTAC TAATTGCATT AGTTTCCTCT TGCTGCTATA
35351 ACAAGTTGCA CAACTGTCAT AGCTTAAAC AACACAAGTT TATCATATCA
35401 TTCTGCATGT TAGACTTCCT AAGTGGGTCA TATGGGGCTA AAATCAAGGT
35451 TTCCACAGGG CTGTTTCCTT CTGGGGGCTT TAGGGAGAAT CCTTCCCTTG
35501 CCTTTTCCAG CTTCTAAAGG CTGCTCATGT TTCTTGCTC ATGGCTGCAC
35551 CACTGTAACC TTTGCATCTG TCCTCACATG CCTCCTCTCT CTGGCCCTCC
35601 CGCTCCCCCT TGTGATTACA CTGGACCCAC CCAGATAATC CAGGATCATC
35651 TCCTGATCTC AAGATCTTAA TCACATCAGC AAAATCCCTT TGTCGTGTAA
35701 AGTAGTAAAG TAATGTGCTC ACAGGTTCCA GGGATCAGGA CATGGACATC
35751 TTTGGGGGAC CGAACATTAT CCTGCTGATC CTACCAATTA TTTAAAAAGT
35801 TGTCTGTAA GTATCTACAG TGTGCCTCTG CTGTGTGCTG GGCATACAAG
35851 GTGAATAAGA CACAATGCTT ATGCCAAAAT AGATACACAA GCACGATGCC
35901 CTTAGTAATA ATCACAGTAG CTGACATTTA CTGAGTATTT ACTATGTGCC
35951 AGGCATTGTG CCAGGCACTT CAAGTGAATT ATCTTGCTGA AATCTACCA
36001 TGGCACTAAG GGAAAGGTAT AATTTCCATT TTAAGGATAA GAACACTGAG
36051 GCTTAGAGAG CTTAAGTATT TTTTCTCAAG GCCACAGAG TAAGGACATG
36101 AGCTCAGGTC TATCTGATTC TAAGCTTGAA CAATTTCATC CAGCCCCCTT
36151 AAAAGATGGG TGGGTTTACC CTCAGGCTCT CTTCTTCACT GTGTGTGTAG
36201 CTAAAGATTG GCCAGCTTAA GAGGAGCAGA TCACACAAGC AGCTATGATG
36251 AGGGCCAGTG GGCAGAGCTC CCAGAGGAGG CTGATGCAAC ATTGCTCCCA
36301 TTCTTGCCAT CACCCAAAGC TGCAAGTCCA TGGCCCTGGC ACTTGGGCAA
36351 ATGTTGCCCT GTCTTCAAGT GAATCTAAAA AACTGTGTAA GGGCATGATT
36401 AATTCACCA AACTGGATT TCCCAAGAT CACTTACACC ACTAATGG
36451 GGCCCTGCTT CAGCCTGAGG AACTGTGTGA ATAAAAGAGA AGAAGCCAG
36501 TGAGATTCTT CTTTCATGAT TAATAGAAAA ACCACCTGGT GACTTTAAAA
36551 GGCAAAGAAG GAGGTACATT CAGATGAGTC AGAAAGAAAA GGCAGCATTT
36601 GAATCCTAAA GGCCATGTTA CTCTTGATCT TCTCCAGGAT TTCCTTTAGG
36651 GAAATGGAAG TTTTACATG GAGGGCAGAG GTGGGGTGAA GGTGGACTG
36701 TAGACTGAGT GGTGTTATAA TGAGACCAAC CCGGTGCTG GGTGGAATCA
36751 TATATTCTAG ATGGGAAGTT TATATTCTAA TGAGGGAGAC ACACAGGGAA
36801 TGAGCAAATC AGTACAGAAT ACAATCTCAG CTAGCACTAA GTTGCTTTGA
36851 GGAAAATCAA GCCAGTGGT GGGCTAGGAA GAGACTGGAG GGGAGAATGG
36901 CCCTTCTGCA GTGGGGTGGT GAGGAAGGAA GTCCTCGCTG AGGAGGCAGC
36951 ATTGAGCACT GAGAGGGAGC TACCCTGTAA GGCCCTGGG AAGACTGTTC
37001 CAGGTTGAGG GAACAACACA CGTGCAGTCC CTGAGACTAG AGCTAACTTG
37051 GACAAATGAG AAGACCACTG TGGCTGGGCG GTATTGAGG ACAGATGGTA
37101 GGAGATGAAG GTGGAGAAGT GGGCCATGCG CAGAATTGG GGATCTAAGG
37151 ACAGGAGTTT GGGAGGTTCC TCAAGGAGTT GTGGGAACCC TCTGGGAAGG
37201 TTTTCAGCGT GCAGTGGAAG GATCGAATTT ACATTTTGGC AGGCAGGTTA
37251 GGACACTGTT GTGCAGAAAC AACAATGGCT AATGGGCTGG TTGAGGTGGG
37301 AATGAAAGAA GTGGTGAAT GAAATCAGGA TGTATTTGGA AGGGAGAGTT
37351 GGCTGGACTG GCTGTGGGTG TCAGGGCAGG GTGGAGCCAT AGACTACTCT
37401 GGATTTTCTG TCCAAGCCCT GGATGAATG CAGTACCATG AATTGAGATG
37451 CACAAGCCTA GGAGAAGAGG CAGATTTGGG ATGTGAATGT GTATGAGTGA
37501 AAACAAAATT TCTCTTTGAA TCATGTTCAA TGTGCTACTT GGACAAGCAG
37551 CTAATTGGAC AACTAAGTGT AAAAATTTAA TAGTGAACAA TGAGTGAAC
37601 AAAACGTTAG AGCTGTACAT TTTGCTTTAG AAGGGGCATA CTTTTTGCTT
37651 TAGAACGTGT GGCAATCTAA TACAAATGGC CAACAACAT ATGAAAAAAT
37701 GCTCAACATC ACTAATGATA AGGGAGATGC AAATCAAAAC CACAAAGCGA
37751 TACTGCCTTA CCCCTGCAAG AATGGCCATA ATAAAAAAT CAAAAAATAA

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37801 TACATGTTGG CGGGGATGTG GTGAAAAGGG AACACTTCTA CACTGCTGCT
37851 GGAATACAA CCACTATGGA AAACAGTGTG GAGATTCCTT AAAGAACTAA
37901 AAGTAGAACC ACCATTGAT CCAACAATCC CACTCCTGGG TGCATACCTA
37951 GAGGAAAAGA AGTCAATTATA CGAAAAAGAT ACTCATACAT GCATGTTTCT
38001 AGCAACACAA TTCACAATTG CAAAAATATG GAACCAGCCC AAATGCCCAT
38051 CAATCAATGA GTGGATGAAG AAATTGTGAT ACACACACAC ACACACACAC
38101 ACACACACAC ACACACACCA TGGGAATACT ATTCAGCCAT AAAAAGGAAT
38151 GAAATGATGG CATCTGCAGC AACCTGGATG GAATTGGAGA CCAACATTCT
38201 AAGTGAAGTA ACTCAGGAAT GGAAAAACCA AACATTGTGT GTTCTTACTT
38251 ATAAGTGGGA GCTAAGCTAT GAGGATGCAA AGGCATCCTC ATTGGACTTT
38301 GGGGACTTGG TGAATAAGGT GGGGGCAGTG AGGGATAAAA GACAGCAAAT
38351 TGGGTACAGT GTACACTGCT CGGGTGATGG GTGCACCAAA ATTTCAACAAG
38401 TCACCACTAA AGAGCTTAGT CATGTAACCA AACACCACCT CTTCCCCAAA
38451 AACCTACAGA AATAATAATA AAAAAGAACT TGTGGCAATC TAATTGATGA
38501 TAATTGATGG TAGCATCCAT GTTGGGGAAG GAAGGAAACA ATGCCAAACA
38551 CTATGCTAGC TGCTTCACAT GTATTGTTTT TCACAGGGTG TAAGGCTTGA
38601 GAAGCATCTA GTGTCTGTG TCAGATTATG CATTCTGGAG GCAGATTGCT
38651 AAGGTTCAAG TCCTGGCCCT GCCTGTTAGT GGCATGTTCT ATGCTTTGCT
38701 TGCTTATCTG TAAATGGAG TAATAATAAT ACCTTGCTTG TAAAGTTATT
38751 TTTACATTTA AATGAGTTAA TGCATGTAAA GCACTTGGA TAGTGCCTGG
38801 TATTGTAATA AACAATAAAT GAGCAATTTT AATGTTACTA TTTTATTTTC
38851 TCCGTAGGGT GCACCTCAAT AGATGGAAGA GTAGGGCATG TGATAAGGTT
38901 TGGCTGTGTT CTCATCCAAA TCTCATTTTG AATTGTAGCT CCCATAATTT
38951 TCACATGTTG TGGGTGGGAC CAGGTGGGAA GTAACGAAT CATGGGGGCG
39001 GTTCCCCCAT ACTGTTCTCG TGGTAGTGAA TAAGTCTCAT GAAATCTAAT
39051 GGTTTTATAA GGGGTTTTCC CTTTCACTTG ATTCTCATTC TCTCTTGCCT
39101 GCTGCCAAGA AAGACGTGCC TTTTACCTTC TGCCATAATT GTGAGGACTT
39151 CCCAGCCACA TGGAACGTG AGTCCATTAA GCCTCTTTT CTTTATAAAT
39201 TAATTACCCA GTCTCAGTA TGTCTTTATC AGCAGTGTC AAACAGACTA
39251 ATACAATGTG TTATAACAAG AGTGTTACTT CAGAATCTTG TTTTAACTTG
39301 TGTATTAGTC ATGTGTCAGG ATGCTTGGGT TCTGTCTGG TTTTGGCCAT
39351 GTTTCCATTT TATGAGCAGT TCCTCTATCA CAATATAGAT GAATGCCTCT
39401 ATCACAATAT AGATGCAGCA ATAAGTTGGG ATTGCTGCAT AGCCATCCCA
39451 ACTTATTGGC ATAAAACAAG CATTTTATTA TGCTCAGATA ATGTGCTTCA
39501 GGGATTTCATG CAGGACACAG AGGCGATGGT TTGTCTCTAT TCTGCAACGT
39551 CTGGGGCCTC ACCTGGGAAG ATGAGCCTCA CCTGGGAAAT CTACAGGTGT
39601 CTGTGGGGTT AGGGGAGGG GCTGAAATCA ACTGGAGGTA TCTTGGCTCA
39651 TGTGACTGGT GGTTGATTCT GGCTCTTGGC TGAGATCTCA GCGTGGCTGT
39701 TGGCTGGAAC ATCTGTATGT GATCACTGTG TTTCTCCACA TGGGTTAGCT
39751 TGAGCTTCCT CACAGTGTGG CAGCTGGATC CTAAGAGTGA GCATCCCAAA
39801 AGAACCAGGC AGAAGCGGTG TGGTCTTTCA TTATTTAGCT TTGGAGGTCA
39851 CATAGTGTC CTTCTGCTTT AGTCACAAGC CTGTCCAGAT TCAAGGAGAG
39901 GGAACATAGG TTCGATGTTT TCACGGGGG AATATTAAAG TCACATAGTA
39951 AGGAGTATAT GGGATAGGAG AGATTGTTGT AGCTAGTTTT GGTAAATACA
40001 GTCTTCCAGG AGGCTTAACC TGTGGGCCAC TTATGAGCCT GTCTGGCTTA
40051 AAGGATCCAG TACACATCTA AATTTGGACA TACTCTAAAA TCAGGATCTC
40101 TTTTATTTAT TAAAGAACCT GAGTAATCTT AACCTAAGTT GTATTTAAAT
40151 TCAAAGATTG ACTCCTTAGA ACAGCTAAGC TTTCGTTTCA TTAATGGGCA
40201 CTGATTGAAT CTTGACTCTG TGCAAGATCC TGTGCTAATG GCTGTGGGAG
40251 CATATTGAGA TGCCACAAGA AGTTGGCATG CTAAAAGGTG AAGACAAATA
40301 CAGATGGCTT TCAATTAAC AGTCTCTGGA GAGACAGAGG CCACTCACAA
40351 CCTCTAATGA TAGTTAAAT AAACTTATT CAGGCCAGGC ACAGTGGCTC
40401 AGGCCTATAA TCCCAGCACT TTGGGAGGCT GAGGTGGGCG GATCACTTGA
40451 GGTCAGGAGT TCTAGACTAC CCCGGCCAAC ATGGCGAAAC CCCATCTCTA
40501 CTAAAAATAC AGAAATTAAC CAGGCATGGT GGTGCGCGCC TGTAATCCCA
40551 GCTACTTGGG AGGCTGAGGC ATGAGAGTCG CTTGAATCCG GGAGGCAGAG
40601 GTTGCACTGA ACTAAGATGG TGCCACTGCA CTCCAGCCTG GGCCACAGAG
40651 TGAGACTCCA CCTCAAAAAC AAACAAACAA ACAAACACTA TTTAAACAA
40701 GACACAAAGT GAGTTTAATG CAACTTATT TAGTTAGCAT TGCATTTAAT
40751 GTTCAGGAAC ACATGTTCCA TTTTGTAGAC TTCATTAATT ACAACTAGCA
40801 GTTATTTAAG TGCTTACTAG AGACATTGAA TATTCTAAGC ACCCTGTGAG
40851 TATTATGTAT TTAATTTGCA CAATACAGTG AAGCAGTTAC TTTATCGTAC
40901 CCATTTTATA GATGAGAGTG AACAGTAGAG AGGTTCTCAT TTTGATGGTT

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40951 AATATTGTCA ACTTGATTGG ATTTAAGGAT GCAAAGTATT GTTCTGGGT
41001 GTGTCTGTGA GGGTGTGTGA GGGGAGATTA ACATTTGAGC CAGTGGACTG
41051 GAGAGGAAGA CCCACCCTTA ATCTGGGTGG GCACCATCCC CTTGGCTGCC
41101 AGCACGGCTA AAAAAAGCAG GCAGAAGAAG GTGGAATGAG CAGACTCGCT
41151 GAGTCTTCCA GCTTTCATCT TTCTCCCGTG CTGGATGCTT CCTGCCCTCC
41201 AACATCAGAC TCCAAGTTGT TTAGCTTTTG GACTCTTGA CTTACACCAG
41251 TGGTTTGGCA GGGGCTCTCA GACTTTTGGC CACAGTGAC TGTCGGCTTC
41301 CCTACGTTTG AGTTTTTGGG ACTTGGGCTG TCTTCTTTGC TCCTCAGCTT
41351 GCAGATGGCC TATTGTGGGA CACCTTGTGA TCATGTGAGT CAATACTCCT
41401 TAATAAATTC CCTTTCATAT GTACATCTAT CCTATTAGTT CTGTCTTCT
41451 CGAGAGCCCT GACTTAATGCA GTCATGGAG CTGGCGTTTG TACCCAGGGT
41501 CTCCCAGTCC CCAGGTGCAT GCTCAATGTG ACAGGGCTAG TTAGTGCAAA
41551 GCCGGCACTA GAATCCAGGT TCTGGATTTT CTTCTTGGTG TTCTTCTCTC
41601 TAGACTTGAG GTTTTGAATT GTGTTCCCTGA ATCTTTTGGG TCCTAAAAAA
41651 GTCTTGGGAC CTGCTGCAGG GGTTGAGAAG AAGCAAAGCT CATGTGACTC
41701 TAGGCCCTTA CTCCAAAGTC CAACCAAGTA GCATGCTTTG AGGTAAATTA
41751 TATTGTGTTA AACTTAATAT ATGATACATA GTATAATGCA ATACTTAATA
41801 TATATTTAAT ATATTTGTAA CATACAAAAT ACAATATCCA AGAGCAGTAT
41851 GGAACACCAA AAGGTGTTCA GACTTTTTTT TTTGAGACAG TCTCGCTCTG
41901 TCACCAGGCT GGAGTGTGGT GGTGCAATCT CAGCTCACTG CAACCTCTGC
41951 CTCCCTGGTT CAAGCAATTC TCCTGCCTCA GCCTCCTGAG TAGCTGGGAC
42001 TACAGTGCC CACCACCATG CCTGGCTAAT TTTTTTTTGT ATTTTTGGTA
42051 GAGACGGGCT TTCACATGT TGGCCAGGAC GGTCTCGATC TCTTGACCTC
42101 GTGATCCACC TGCCTTGCC TCCCAAAGTA CTGGGATTAC AGGCGTGAGC
42151 CCCTTCCTTC AAATGGAATT TTATATCTGT GTTTACATTT TCTGCTTAAA
42201 GTTTGAATTT TGTTTTAATC AATTGAATTT CCACTTAAAA TGTAAACTTT
42251 TGAAACCCAC ACCTCTGACA TATTCCACAT TGCTGTTGGA TATTTTTAGT
42301 TTAAAGATTT GGCCTGTAAG CTGTATCGGT ATCATTATTC TAACCTCAGG
42351 CTCAGGTCT CAGTCACTAG TTAAAGTCTT TTCTACCGGC AAATCTGTAT
42401 TACCATCTAC TGTGGAAGAT AACCTCTAA GTGCCCATGT AAGCACAAAT
42451 CCATAAAACT AAAAGTCAAA GAAAAAAGAG AAAGAGTTTA TTCCACTGTT
42501 TAAAAGTTCA GTTTGATTTA GATCTTATAT CTCTTGGGTT TTCTTGACTG
42551 ATTTTTTACA TAAATGTGTC CCAGAAAGAG TGATCATATC GTGATCTTGT
42601 TTCCCAGTTT TCCTTTTCCA CATCAAGTTT TCCTGATGGA AAGTGATTTA
42651 AAAAAACCTT TAAAGTGTGA TAATCACTCT CTTCTTTAGT AGACAGTGGA
42701 GTTTAATAGA TGCATACAGC AGTTGTTTAC TTGTGATGAA AAGAAATGTG
42751 AATTTCTTGG TGCAAGGACA TTTCTAGCT ATGTCTAAAT TGCAGAGAGA
42801 CCACAGTTTG ACATAGTGCT GAAGCAGGTT GTAAGAGGTA GGGGTACAAT
42851 GTATGTCTGC ACAGGTTGTG CACTATGCGA CTGTGAATGG TGTCTTCTGG
42901 AATTGTCTAT GCGGAAGCAC TGTCAGGAGG TCGTGGATTC CAGCCTCTGT
42951 TGATTTTTGT GCATGGGAGA GCTTGATACC AAGCCTCAAA GTACTAGGAA
43001 TAAGAAGGTA TTACATGCTG TAATTTTCAA GGTGGTGCCT TTCTGTACCT
43051 CCATTGCTTT TAGTTTAGGG CATTCTTCTT GCAATCTTTG GAGGGTTCTT
43101 AGGAATAAAA AAGTAGCTAG TTTGAGACAG TGTGCAATTG TGCTGAAATG
43151 GAGGACCATG GGGGTAGATG TAGTCCCTT CATGCCAGTA GCTAATTGGC
43201 TTAGTTTGCT GATTTGTTCC AGGATATTCC CTAAAAATAG GTGTCTTCTA
43251 AGCCTCAGCT TTGGGCCTTG AGGTATGGCA TGGCTATCCG CTCTCTGCTC
43301 CTGCTGAGCT AAATGCAGTC CTGAATGCCA AATATTGAGA TTTGGAATTA
43351 TCAAAGGACT ATTAGCATCA AATTGAGAAA CTCAAGCTAA ATTTGCAAAT
43401 TAATACAAAA TCATGAAGT AGCTTCTCTT CCAGAGAACC TCTTGTAACA
43451 GAACTTGAAG GTGGCAGGAT GTCTTGATAG AGCGTGGATT TTAGAGCTGG
43501 ATGCATGCTG GGCTTATATC CTGGTTCCAG CATTTGCCTT GGGCAAGTTA
43551 TTTACAACCT CTGGTTGAGG TGGTTGGACT AGTTGATATC TATGATTCCT
43601 TTTTAAGTAA ATAACATTA GTTTTTTCAT ACAGTATAAT TACTATATAA
43651 CAAACATCTT CTCTTTTGAT TTCATTATG CATTCAAAGT ATTTATTAAA
43701 TGCCCTCCAA TGCCGGACAC CATACTAGGT ACTGGGTATA TAAGAGTGAA
43751 CCAAATGAGC AGGGTTTCTG CCCTCAGGGA GTTGATAATC TAGTGGGGAA
43801 GGTGTTGGGG ATGATGGTTC ATCAATAGTA AAGAAACAAA TAATATAACT
43851 ACAATCATAC TTGCTGTGAT AGAGAATAAT GGGGAGGACC CTATGTATTA
43901 GTGGGGGGTA CTCTAGAGAA ACAGAACCAA TAGGATACAA ACACACACAC
43951 ACACACACAC ACAAATGTGT CTTGGGTATA TATATATCTA TATGAGAGAT
44001 ATATGTATAT ATGTACATAT GTATGTGTGT GGGGGGATG GGGGATATAT
44051 ATATATATAT ATATGGAGAG AGAGAGAGAG ATTTATTTAT TTTAAGAAAT

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44101 TGACTCACAC AATTATGGAC AGGTCCCAAG ATCTGCAGGT GAGTCAGCAA
44151 GCTGGCGACC CAGGAGAGCT GATAGTTTAG TTCCAGTGCA AGTCTGAAGG
44201 CCTGAGAACC AGGAAAGCCA ATGGTATAAT TCCCCTGAAA AGCCGATATT
44251 TCAGTTCAGG TCCAAAGGCA GGAAGAATTC TCTCTTACTC AGGGGAAGGT
44301 CAGCCATTTT GTTCTATTCA GGCCTCCAAC CGATAGGATG TGGACCACCT
44351 ATGTCGTGGG AGAAATCTGC TTTACTCACT CTGCTAACTT AAATATGAAT
44401 CCCATCAGAA AGCACCTCA CAGAAGTACC CAGAATAATG TTTGACCAAA
44451 TATCTAAGCA TCCTCTGACA CAGTCAAGTT GTCACATAAA ATGAACTATC
44501 CTAGGCTACT TAGAGTAGTC AGAAGATACC TCTCTGACAT GGTAACATTT
44551 AAAGTGAAGC CCAAGGAATG GGAAGGAGCC AGCCGTGGAA GAATGGGGGA
44601 CAGGCCTTCC AGGCAGAAAG AAAGTGAAGT GTAACCGAGT GGAACTGAA
44651 TGGAACTGG AGTCCAGAGG GAAAAGGGGC ATGTTGTGAG ATGAAATTAG
44701 AGAGGGGACA GAGGCTTTAC TGTCAGACCT TGGAGCCAT GATAAGGGGC
44751 TTGCATTTTA TTCTAGATGC AACGATGAGA GGCAGTGAAT TTGAGCACCT
44801 TGGAGCCAT GATAAGGGGC TTGCATTTTA TTCTAGATGC AGTGATGAGA
44851 GGCAGTAAA AGTTTGAGCA AGGAGGAATG TGAGAGGATT TATGTTTCGA
44901 AAAGATTTT CTGACTGCTC TGTGGGAGTG GGTGAGAGTG GAAAGTGGGG
44951 AGACCTGAGA GAAGGCTATG GCTGGAGCCT AGTAGGGAGC AGGTAGCCTG
45001 GATGGAGGGC CAGGGGGACA GAGGGAAGTG GATTGTTTGC AGGTCTATTT
45051 TGGCGGTAGA AATGAGAGAA CTATTGGGGA GGGACAGGAC AAGAGAACAG
45101 AAAGTAAGGC TGCCTCTCAG GATCCTGCCT ATTTGGCTTG AACGGTTTGG
45151 GTGAACATTA CTATCATTCG GGGAGGTGAG ACTTCCTTTT TTGGTTGGGT
45201 CAATAACAA GCGCAATTTT CACTTACTAA GCATGAGACA CACCTGAGGT
45251 ATCCAAATGA AACTCAATAG TAGGCAATTG GGTGTGTGAA GCTGGAGTTC
45301 CAAGGACATT TTGGGTCTGG GTGTATAGAC CTGGGAGCCA TCAGCATGTA
45351 GGTAGGGATT ACACAGGGAG AGGATATAGA ACAAAGGGG TGCAGAAAAT
45401 AACCCACGGA AGTCCAGTGT TTAGGCAGAA GAAGAAGTAT CTGCAGAGTG
45451 GATTTAAAAA GACCCAACGA GAGAGGGTGG AGGAAAGCCT TGAGAGTGTG
45501 ATATCACAGA GGCTGTAAGC AGGGAGCTTT TTAAGAAGGA GCAAGTTCTC
45551 CTGTGCAGAA TATTGCTGAG AGGACAAGTG ATGTGTGGCC GTGTTGGTGT
45601 CCCCTGTGTC GGTAGCAGAG ATCGTTAGCA GAGCAGTTTC AGTGGAGTGA
45651 CAGGAGAGGA AGACCAGTAG ATTTTATGCA GTTTTAGGAT GGGTATCACC
45701 CAGTGTATTA GTCCATTTTC ACGCTGCTGA TAAAGACATA ACCAAGACCG
45751 GGAAGGAGAG GTTTAATTGG ACTTACAGTT CCGCATGGCT GGGGAGGCCC
45801 CAGAATCATG GTGGGAGGTG AAAGGCACTT CTTACATGGC AGCAGCAAGA
45851 GAAAATGAGG AAGAAGCAAA AGTGGAACC CCTGATAAAC CCATCAGATC
45901 TCATGAGACT TATTGCTTAT CATGAGAATA TCATGGGAAA GACTGGCCCC
45951 CATGATTCAA TTACCTCCCC CTGGGTTCCT CCCACAACAC ATGGGAATTC
46001 TGGGAGATAC AGTTCAAGTT GAGACTTGGG TGGGAACACA GCCAAATCAT
46051 ATCACCACGT TTAGTACTTC ACTATGTTT TGGCCAATTA TGTTGGGTAG
46101 GGGATGGTTG TGCTCCTCCT GTCCCTTACC TTAGAGCTGG CAGATAAAAT
46151 ACCAGATATC CAGTTAAAT TGAATTTTCA AAAACTTTTT AAAAAAGTAT
46201 AAGTATATCC CAAATATTGC ATGGGATATA CTTACCCTTT AAAAAATTTA
46251 TTGCTATTGT TTATCTGCAA TTCAAATTTT ACTGGGTGTC CTGTATTTTT
46301 GTTTCCTGAA TCTGGTAGCA CACATTGAAT TGCACCCTTT AAAATGGCTA
46351 GAATAGGGAA TTTTATGTTA TGTGCATTGT AACACACACA CACACACACA
46401 CACACACACA CACACACACA CGTATCTGGC AATTCTCCCT TAACTAACT
46451 ACCATGTAGA AGCTACCATG CGATGCAGTC TATTCTAGG TTTAGCCACA
46501 AGGGTCAATA AGAAAATCTG ACCTCAAAGG AAATTATGTC TGGTATGGT
46551 TAATGCTTCT ACTAAATTCC CTTAGAGCAT AGGATGCTGA GCCCATAGTA
46601 GGACCTCATC AAATGCTGGT TTGATAGAAA TTGCATTTGG GGAAAATTAG
46651 CAGCTGTTGA TAACTGAATG GAAAGAAATG AACTACCCTG GTACCTGTGG
46701 TACAACTTAA AGAACACCAT GAAATGGGCC TCATGGGAGG TTCTCAATGA
46751 ATTCAGTGGC GTGGCACTTT TGGGCATGCT TTTGGAACCA AGTACTTACT
46801 CCATGTGCCCT GTGAGTTTGG CACCTCTCAT GGCAGCCCAA GTGCAACTGG
46851 TTTCTGAGGG GCCATTAATA ATCTCCCAAT GGCAGACAAC TCTCAGACAT
46901 GCCTGCAAA TCCAAAGACAG CCAGGCTGAT CATCTGCTAC TTTAATTGGT
46951 TATACCAGTT TTTATGCCTT TGTTTCTCCT CCTTCTGTG AGGTGGAGGA
47001 AACATAACCA CAAGACTGTT TCCAGTGACC TCTTCAGAGG CAATTTCCAA
47051 GCAATTAAGT ATGGGTTGAA TCCAAAGTGT ATTGATGAAT TAAATCTGT
47101 TCCTTGGCTG AAGATTCTGT TCCTTGGCTG ACACCTGAAC TCAAAGGTTA
47151 GATTGAACTA TCTAGGAAAA CGGTTTTTCT CTTGTGTTTT CCTGCAGGCT
47201 TTGCTGTTTA CGAAGATCTT GCATCAACAC TTAGCATTCA CTCACATGGC

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47251 AAGCTTGCAT GTGGTACTTT CATTCCACAT TAATTTAGGG AACTCTACTA
47301 TGTGCCAGCA TTCAATATCC AATTTGTCTT AGATTTTCGA ATAGTGTCCC
47351 ACAATTTTAT AACTGGGGAG TTCCTTGAAT GGAAATATGT TCACAGTGGC
47401 TGCTTAATTG TGACTAACCC ATCACATAGA GACTGCTTTG GTAATAGATT
47451 TGATTCTGAG GGTCTAGGAG AAGGGACACT TCTCATATGG GGAAGACGGG
47501 ATTAATCCTT GAAAAATGATA CTGAAGCCAA CTTCTGTACC AGTATAGCAG
47551 CTTAGCAGAC TTCTATATGA TCCATGTAAG GGTCTGTTTG CTCTCTGAGA
47601 TTTTGGGTGC CTTCTCTAGC CCCTGAGTGC TGGGCTTCTT CTGAATTCCA
47651 TAGGGTGGA GGTGAAGGTA CCGCCAGCTC TCACCCAAC CATCCATCCC
47701 TGGACAGCAG GGATTTCTGCT CATCACCTTG GTGCCTCCGA TGCCTGAAGC
47751 ACAATAGGCC CTCAGCAAAC ATTTGTTGAA TTCATGCCAT GAACATTAAT
47801 CGAGCCCTTT TTATACACTG TGCCTGGGA TTGGGACCAT GGAAATTTA
47851 GAGAGGAAAA GGTCCACCTT CAAGGGGCAT CTAGAGGAAC TTATCCTCTA
47901 GCAGGAGAAA TTGCTAATGA GAAAAGGTAT TTTGGGGAGT GGAGTGAGGT
47951 GTTGGTCTAG CTGGCAGGTT CAGCCTATGC TCAGTGGCTC TCTGGTATGG
48001 AAAATTCCTC AGAATGTTGA TTCAGCCAAA GATTTCCTG GCAGCACTGA
48051 CTCTTGCTT CTTTCGCCA CATTTTATTC CCCAAACCTA GGTGTTACTG
48101 GGAAGAGACT GAGCTGTTTT ATTGAAGATA ATTGACTTTC CCAGTTTTTA
48151 AGTAAGTCTG TTGATTCCTC GAAGACTTCA CTAATCAGAG TTATGAATAT
48201 TTCAAAAACA CTTCCCAGTC TTCAGATGAA TGGATTTGTA GGTTTTCTAC
48251 ATTGCTGTCT CCCTAGCCCC ATGAGGAATA ATGTGGGTAT CTTTTCCCT
48301 TTTAGGTTTC TCTCTTCTC TAACCTGCGC CCACTCCCAG CCTCTGATAG
48351 ATGCATTTGC AGAAATGTG AGAAATGTG CTGATGTCAG CAGCACTGAT
48401 ATGCATTAGA GGAGCCACTT CAGAGGAAAT TACTCAGAGG GTGATGCTGA
48451 AATGCAAAGC TGTTTGGTAG GGTATTTTGT AGAAACTGTT TTCTCCCTTT
48501 GATGGATCTT GTTTATTTTT TTTTGAAGTA GTAGGCACAG TGAAGGAATA
48551 ACCATCCAAA TGTTTTTTTT TTTTCCATTT AAGTTTGTGA TAGGAGGTTT
48601 TGGTGAAGCTT GAAATGAACC AGGAGCACTG AGCAGCTACA CTGACAAATG
48651 GAGATGGCTG AGGCTGCTTG CAAAGCAGTG TGTGGGGTG TGGAGCCTCC
48701 ATGTCACTGA CCTGGGGAAA GGCAACAGTG AGGGCACACC TCATTCTACA
48751 GAAATGGTTT AAAAATATAC ATATGATACC CCACTTTTGA TGCACACAGA
48801 CTGTGCTGTT TAAATGCTTT CGATGGAAAA TCCTTTTGTA AAGTACACGT
48851 CTATCTTGCA GAGTAGGATT TCTGTATATG ATCTCAGGTT TGTTTATAGG
48901 GAGGTACACT TGGATGCTT CATGACATTT ATCATGACAG CTGTAGCTGA
48951 GCAGAGAAAG AGGGCAGGAC TGCCATGGGG CATCAAGGGC CATTTGAAGA
49001 AGGAAATGGT GGACTGAGAG TGATAGCGAC CTGTGAGGCT GCCTGGTTTC
49051 TGTAGCAGTG TTCAGCAGCC TGTGACTCTG AGCAGAGAGA AGGAATATTA
49101 TACAGGGATA TTTCCAGGTA GCTCCAGGAA AAGACAAAAG GGGAGGAAGT
49151 TGAGTCTGTT AGCTAAAGAG CAGTGTGAA TATGGGATCC AAGTTGGGTG
49201 GAGAAGAGAA AGAGAACACA GGGAGGGTAG GATGACAGGA GAAAGTAGAG
49251 GCAGGGTATG ATGTGGGAGC GATGAGGGTA GCAAGCTGGA AAGAGAGGAT
49301 GATCTAGTCA ATGCTTTAGT GTGCCCTTAGG GCTACTATAA TGAAATACCA
49351 TAGACTGAGT AGCTTTTGCA CAACAGAAAT TTATTTCTCA TGGTTCTGGA
49401 GGCTGGGAAG ATCAAGATAT CAAGGCAGAT TCAGTGTCTG GCAAGGATCT
49451 GGTACCTGAT TGACAGACAG CTGTCTTCCT GCTGTGTCCT CACTCGGTGG
49501 AAGGACCAAG AGATCTCTCT GGGTTCTCTT TTATAAGGGC ATGAATCCAA
49551 TTCATGAGGG CTCAGCCCTC ACCATCTAAT CACCCCCCAA AGCCCCCACC
49601 TCCTAATCCC ATCACATTGA GGGTTAGATT TCAGTGTGTG AATTTTGGGG
49651 GACACAAAAA TTCAGACCGT AGCAGTAATC GCTTCAACTG AGTATTGAGA
49701 CAGTTCTTGT GGTAACAAGG TTTAGGGTGT GGCCATAGGG AGACTCAGCT
49751 GTAGTGGAGC TGTTGGGGCT GTGCCAAGGT CACCCAGATC CGTTTTGTTC
49801 TGTGCACCTG TCCTTTAGCT TCTGGGGGCT TCTCTCTTTC TGGCCTGTAC
49851 CTACAGCCTT TTTTCAGAGGA CTCTCCTTGG TCTACCGGAG CCTATTTTCA
49901 GGATGTTCTT AGGAGTTTTT TGAGATGGAG TCTCCCTCTG TCGCCCAGGC
49951 TGGAGTGCAG CGGCACAATC TCAGCTCACT CCAACCTCCA CCTCCTAGGT
50001 TCAAGCCATT TCCAGCCTC AGCCTCCCAA GTAGCTTAGA TTACAAGCAT
50051 GCACCACATAT GCCTGGCTAA TTTTTTTTTT TTTTTTTTTT TTTGTATTTT
50101 TAGCAGAGCT GGGACTTCGC CATGTTGGCC AGGCTGGTCT CAAACTCCTG
50151 ACCTCAGGTG ATCCCCTGCC TCGGCCTCAC AAAGTGCTGG GATGACAAGC
50201 ATGAGCCACT GCGCCTGGCC ATCCTAGGAG TTTGTATCAC CCACTCCTTC
50251 ACGGTTTGTG TGGAGGGATC TCCTAAATAA ATAACTCACA AACAAATTCT
50301 CATCCGGGAT CTGCTTCTGG GATACCTGCC CTGAGTTAGT GGTGAGATG
50351 GAATGGAGAT GATGGCAATG GTGATAAATT CAAGGAAATG GGAGGCTTGG

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50401 GTCTTGGCTG GGTGTGTGT GGGATGCTGA AGTCACTTAG GAGGGAAACA
50451 GGACCCAGAG AGAAGGCTGC AGGAAACTGG GGGAGCAGCC AGGTCTACCA
50501 CTGATGGCCA CGGGGAAAGA GTAGGAAGTG GAGGAGCCAG AGGGCTGGGG
50551 TCTCAGAGGA ACTGTCGGGT TTGACACAAG AATT'TGGGGT ATTGGTTTTC
50601 CAGGACAATG TGACCCTGAT GTTGTGGGCG AGGGAGACTG AACAGCCCCT
50651 ACCCCAGAGT CACACTGACA GCACAGTGTC CTCAGGGAAA GCCCAGGTAT
50701 CAGGAGAAAA GGCGCAGGAA GGGGCCCTGA AGAGGCTGGG GGCATGAGGG
50751 AGTCTTCAGA TCTTCAGCAG GGGCCCCCTGA GGCATCTTTG GAATGGTTTG
50801 GGGTAGGGGT GAGGGGAAGG TTGGATCAGA GGGGAGGAGG CTGAGAGCAG
50851 AAGAGAGAAC AAAGCTACAC CAAGTGGCCT CACTGGCCTC ACACTTCTCA
50901 GAATTGGTCC CTTCAGACCC GGTGGTGGGT GGCTTGGCAG CCTGGATGTG
50951 GGGTGTGGAG ATTGGTACTA CTCCTGGCAC ACAGGGGGCA TGCATTGGTT
51001 GAATAAACAA ATGAATGACA CATCAAGTTT GTAGATGCCC CACCTTTTCA
51051 TCATTCTGAA CCATTGTCAC TTCCATGTAT TTTATGGTCT GATAAATATG
51101 GAATTAATCG AAGTACCTCT AGCTATTTGT TATCACCATT ATTGGGTGGG
51151 ACACAGCGAA CAGATTCTTT AAAGCTAGGG AATTATGCAA TAGGACATGT
51201 TACGGAGCTTA AGCCATAAGA TCCTTTT TTTT TTTT TTTT TTTT
51251 TTTAGATAGA GTCTCACTCT GTCACCCAGG CTAAAGTGCA GTGGTGCAAT
51301 GTCGACTCAC TGCAACCTCC TCCTCCCAAT TCTCCTGCCT CAGCCTCCTG
51351 AGTAGCTGGA ATTACAGCGT GCGCCACCAT GCCTGGCTAA TTTTGTATT
51401 TTTAGTAGAG ACAGGGTTTT GGCATGTTGG CCAGGCTGGT TTGGAAAGGA
51451 TCTTTCTAAT AGGCCAAAAA ATATTTTCTA GTTTTGCTTT CTA CTGTGGA
51501 TCTGTAGATC CACAGTATAA CTACTTATGG TCTATTGTG TGTGATTGCA
51551 GATACTGAAG GAGTTTGTCTG GGAAGGGAGA AGTGTGTGTG GAAGAAGAGG
51601 GGAGGGCTGG AGAAGTGAGA TGAGCCCTGA GCACACGGGA CATTGGAGGC
51651 CAGGGAAAGA ACCATGGCGG TGCTTGTGGA GTTTTAATAG GTGCAAGCTG
51701 GGAATTTTCTG AAGGCTCACC TGGCTGCTGA GTGGAGCCTA GGGCAGGGTG
51751 GGGGGTGGGG GGAGACCCCT CCGGGAGCCA GTGAGGAGAG ATA ACTGCTT
51801 TTGACAAGAC ACCTGGGAAA GACATCTGGA AGGAATGGCG TTGACAATAA
51851 GATTTAAAC CTTTGGCCCC AGGGAAAGGG GATATTTTGA GAACTATGAC
51901 TGCTTGTATT ACTTTTAATC CCAAGAGGAG GATAAAGGTC TTTCTGTAT
51951 AAAGTGCCT AGTTAATTTA AATTGTGGAG GAAAAACTT AGGGCAAGAG
52001 ACAGAATATG ATATTCAGGA AGCATT'TTG AAAAAAGAC AAGGAACCCC
52051 AGCTGTGGCT GTGTGCACCT TTAGGGCCTT GATCATGGAG GCAGGATAAA
52101 GAAGTCCATC TCGTCAACAT GGCGGAGTCA GAGTCTATTG GGAGAATCAC
52151 GAGGTAGGCA GCTCTAAATC CCAAAAGATG GTGGTCCAGT CGGATATGCC
52201 TGGGCTGCTC TGACCAGCTC AGCACACACA AGGAATAGCT CTGGTCTTGG
52251 GCAATTTGTG CCCTGGGTCG GAGGGTGAGA GTTTATTTTA TCGGAACAAT
52301 AAAGGCATCC CACCTGCTAC CAGGAGCAAC CAAAAATGCT CAGAAGTTCT
52351 GGAACAGGAG TGCTGTTGAA CAGGGTTTCC TGGCAGCCCG AGATAGAAAG
52401 TGGTAAAAAC AGCAAAATGC TGCTATGGTA TAGTACTGAA GTCATCAGGC
52451 ACACACTGAG ACTTCTGTG GGTGAGCCTT TGTGAATGGT GCTGGAGACA
52501 GAGACTGGGA TAAGATCTAC CATCTCTGAT GCTGACGCC AGCCAGTTT
52551 TCCCCTTTTC CTCTCTAGTT TTTTCTTTCT CTGTCTGCA TCCCCCTCCC
52601 TTTGCTGTCC CTTAAATGTT GCTCCCTTGA GCATCATCTT TTA CTCTCTT
52651 CTCATTTTAC ATCTCCCTCT GGACCACTT ATCCAGTCT GTGGCTTCAG
52701 TACCATTAC ATACTCATCA CTCTTAAATC TAGGGATTCA GCTAGATTAT
52751 TCCCCTGAGT TCTGGTCCCT TATGCCTCAT GTTAACTGGA TAGCTCCACC
52801 TGGATGGGT ACAGGAGCTG CACACCTAAC TCTCCTGCAT TTTCTGTCTT
52851 GCAGAGCATG ATACTGTTAT AAGCTTATAA GAGTCATCCC AGACGCCTCC
52901 TTTCTTCTT TGCATCCATC ACTAGGACCC GCACATTTTA CTTCTTAAC
52951 ACGCCTTGTC TCTGACTCCT CCTCTGCTGC TGCCTGAGTT GAGGCCTCAT
53001 AATACATTCC AGTAAACTCC TACCCACACC CCCCACAGAC GATCTCTCAC
53051 TTGCTGCATG TCTCTTACGC ACTGCTGCCA GAGTCAGCTT GCTAAACCCA
53101 GGTCTGACCC CCTGGCTCTT CTCCCTGTGT TAGCCTTGAT GGCTTCCCAC
53151 GCTCATTAAT AAGACCAACA AGAGCCACAC TCTCTCCTCT GCTTGTCTTT
53201 GCAGCTTTAT TTTGGTGTAG CCATCTTAC ACCCTCTAGT CCTGACACGC
53251 AGACCTGAGG TAATTTCCCA AATGCCCCAG GCTGATTAT GGCTGAGTGT
53301 CTTTGTATCT GTTGCCCCC CATTGCTGTT CCGCCTTCCT CTCCACCTCC
53351 TTCTGCCCTC TCGCAGACAC CTAATGCCCT TTCCACACCA GTGGGCACCT
53401 TGTCTTTGCA TTCTCGTCTC CTCTTCGGTG GCACTGACAC TCTCTCTTCA
53451 TGTCTTTCTG TCCCCACAC CTCTGTCAAA CACAGCATCT GCACGCTTTG
53501 TTGCATTTGC TTGCATAGAA CACGTAGTTT TCTTCACCTC CTAATAATGT

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53551 GGACAGCTCA CGTTGATTGA GGACTTGCTT TGAACAAGGC ATTGAGCAAC
53601 ATGCCGTACA TTTTATGTTA AATCTTCCCA ATAGTGCTAC TGCTTCTGTC
53651 CCTTTCAGG GAGGAGGAAG GAGGCTTGA GAAGGGACTG TCTTTTAGGA
53701 GCCCTGCCCA GTGTTTCTG TGGAGGGTGG GGCCATCGTG GAAGACAGAC
53751 CTATGGTAGG GGTAAGCTGG GTGGCTGTG AAGTCCAACC TTCCCCCTTC
53801 TTCTCTAAC CCTGATAACC TTGTTCTCTG GGGCCTGTCT GCTAGTGGAG
53851 AGGCTTCTGA CTTTTTTTTT TTTTTTGCCA TACCTTTGGT TTATAAATAC
53901 AAGAAGAGAT TTGGGGGAAA ATCAGGGGAA ACTGTCGAGC TTACAAGTCC
53951 CGAGAAGGAA GTCATGCTC CTTTAAGTCT CATGTGAACC CCTTGTCTC
54001 TCCCCAGCTT GTGGGTGAA AGAAAAGCCC TTTAGTCTT TGGGTCCTCA
54051 AATCACAGTT TATGCAGTT GGCCCCAGTC AGAGGGACCC CAGGAAGGCA
54101 GACTCAGGGT AAATTCTGCC TGTCTTCCAC CAGAGAGGGG ACTCACCAAG
54151 TGTGACTCAT GCCATTCAAT AGAATTTTAA AAATCTCACA AGTATTTTGT
54201 ACCCCTGAGT AAAAGAGAGG CTTGTAGCTC TTCATGAAGG AACAAGAAAG
54251 GCCCGAACTG AGTGTTTGA GCCCAGTGAA GTAAAATACT GCCCTGTCTC
54301 TTGCTGTGCC ACTCTAGCGC TTGTACAAAC CATGAAGAAC TCTCTTGGGA
54351 CTGTTTTGCTT TTTGAGAATG TTAACACCTT GACTCTGGAT TTCTGCCTAT
54401 GGGAAAAAAC CACAATAGTG CCAGGGGTGC TTCCATATGC AGGATTAACT
54451 CTGCAGTCAA AGTTTCTGTT GGGCAGGTGT GTGAACCTGA TATCATAAAT
54501 GCTGGCCCAA AGCAAATGGG AGAATGGATG AATGAACAAA TTCAGGAATG
54551 AAACAACTG TAACCAGGGG TCTCCTAGTT GTAGGTCTC TGCTAAACTT
54601 CATATTGAGA CACAAAGGAA GGGCATCTTA TAATATAATG TTGGGGGATG
54651 AGCACTCAGC TTGGAGGTGG GGACACGTAA GGTGGGTTTT GATGTTTGAG
54701 AAGGAATTGA CCAAAAAAG AGTCAAGAGG TGAGAAGAA CTGGGAAGTG
54751 AGACCTGTTT CTCTGGGACA GGTGTGAGCG GGTCTGGGTG CTGCTGGGTT
54801 TGGCTGGGGC AAAGGTTGCT TGTGGGGCG TGGCAGTGGG TGAGGCCTGT
54851 GAGATAGGCA GGCGCCAGGT CCTGGAAGGG AGAGTCAGGG AGCAAGGCAT
54901 GGAGCCTGCA CTTTACTCTG AATGTTGGTG GCGCCTCAG AGCATTGTGA
54951 GCAGGGGTCC ATGTGATCAC ACTGACACCT GAGAGAGTGA CACACCATGT
55001 ACATGGCTGG TATATGGAGG ATGGATTAA GGGGGACAGG ACTGAAGGCT
55051 GTCGCAGTGA TTCAGGTGAG AGAAGATGGG GTTCTGGACT AAGGGGACAG
55101 GAAAGCACAG ATGTGAGATG AGGTGGCAGG CAGTTCTAGC TCCCTCTTCC
55151 CCCAGTCTG CTTGTTTTTC CTCTTCTCAT GGCTCCATAG GGTCTCAGTC
55201 ATTTTCATCAT AGCTTGATCT CTTCCATCTG GAAGTGCAGC CTGAAATTTT
55251 GAAGACAGCA GGGAGCAATG CTTACCCAA AGGGAGAGCC TCGGGTGGCG
55301 TTTTGGGACC ATGGCTTGCT CTCTTAGTGC ATACAGACTT AGTGTACTG
55351 CCATTCTTAC TTGGATCAGC TTGATTGCCT TTAAGGTAGG CTGTCTCATG
55401 GAAACAGGGA AAACATGATT TGGTTGTTG GGTATCTGGA ACCAGAGGCA
55451 GCACAGATAC TGCTCTAAGA GCTGCTGGGA CAACTGGAGG CCGGTGTGGG
55501 TGGAGCACCC GAGGTGGAAT CCTGCGCTCC TCATCTTCC TGCCCTCTTC
55551 CTAACACCCT CCCTCCCCAG CGGCCTGAAG TCTGCCTATG CCTATGCAGG
55601 CTGAGCTGTA ACCTGGGACT CTTTGGAGC TCTGAGCCAT CAGTGCAGGT
55651 GGCCCCGGAA TGATTCAGA CCTAGAGTAG GGGTGGGAGG TCGGCTGCGG
55701 GGCGGGGGGA GGTGAGAGGA GGCTGTCTT TCCCTCTTGC CCGGGAGTCT
55751 GCAGTCACAG TTGCACTTTG CCTGGGTCAG TAGCAGAGTC ACGCTGCTGT
55801 GTGACAGTGG CACTGAGGCA GCTGCATTTC AGGTTTCAA GAGACTCTGA
55851 ACCCTTGGA TGCCATTTGT TTCAGGTGAC ATGGAGGAAT GGAGGCACTC
55901 GGGTTAAGTG TCTGAAGATG GATTCAAGGA TGCCCCTGCT TGTTAGCTTG
55951 TCATAGGTTG CTCAGTGTC CCTCTCTGGC CCGTAGTTTC CTCATCTATC
56001 AATGGGGGCA GATAATAATC ATCACCTTAC ACAGAAGGTT TGGCGAAGAT
56051 AAAACAGGT TCACTGGCTG GGTGCAGTGG CTCATACTTG TAATCCCAGC
56101 ACTTTAGGAG GTCGATGCTG GCAGGTCGCT TGAGGACAGG AGTTTGAGAC
56151 CAGCCTGGAC AATGTAGTGA GACCCCATCG CTACAAAATA TTAATAAATT
56201 AGTTGGGCAT GGTGGCATAT ATCTGTGGTC CTAGCTACTG GGGAGGCTGG
56251 GGTGGGAGGA TAGCTCAAGC CAGGAATTCG AGGTACAGT GAGCTATAAT
56301 TGTGCCACTG CACTTCAGCC TGAGTGACAG AGCAAGATCC TGTCTCAACC
56351 AAAACAAAGC AAAACAAAAA CAGCTTCATG CACGTGTAAAG ATCTTTGTTA
56401 ATTCTTCCAT TAACCTCTGAA GGCGGGATGC GTCTTATTAA TTTATGTAGC
56451 TCCAGTGCCA AATGCAGTGC CAGGCAAACT CAGTTGTTTG TTGATTGAAC
56501 GAATGAATGG ATGGTGCAGT AATATCTGTG GGGCTTGAGA AAGCCTGAAT
56551 AATGTCAACT TATTAAGAGC TTGTTCAACC ATGAAAAAGC AGATTTCCAC
56601 ATGTACCCCT CCATATCACC CACATTTAGG TGAAAATGAA ATATGTGCCG
56651 TATTCTTTTT TTTGAGACAG AATTTATCTC TTGTCACCCA GGCTGGAGTG

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56701 CAATGGCACG ATCTCGGCTT CACTGCAACC TCCACCTACC TGGTTC AAGT
56751 GATTCTTCTG CCTCAGCCTC CCGAGTAGCT GGGACTACAG GTGCATGCCA
56801 CCATGCCCGG CTAATTTTGT TATTTT TAGT AGAGCTGGGG CTTACCATG
56851 TTGGCCAGGT TGGTCTCGAA CTCCCAGCCT CCCAAGTGCT GGGATTACAG
56901 GTGTGAGCCA CTGCGCCCAG CCATGCAGAT ATTCTTGAGG AAACATTTTA
56951 AAATGAAAAC TAGCAGAAAG GATATTACCT TTCAACATTT CCTTTCTCAT
57001 CAATTCTTGG CAGCACTTTT GCTGCCCAGT ACTCTTCTGT TGGAGCTGTG
57051 AAGTGTGATA GGCCATTACT TTATAGATCC ATTCATTATT GATACGTTTT
57101 GTAGGGAAGA ACTCCACTGC TGTTTGGAAA CTGAAGTAGT CAATCTCATA
57151 GACTGGAAAA TATTTTAAAT GCCTATTGA AACAAATGTC GTTCCTATTT
57201 TTTGGGATAA AAGGGCCCTT TCCCCCTGGA ATTGCTATGT TTCCTCTTTT
57251 CCTGTTCTTA CACTCTGCAG AACTGACTTT GAAGTCAGAT GATTCCTTTT
57301 TTAATCTGGC TTCTCGCTTT TGGGCCGCTT AACCTTGACT TAGCCATTGA
57351 ACCTGTCTGG GTCTCAGTTT CTTTGTCTGT GAAGTGGGGC TGTGTTGGGC
57401 ATGAGCATGC GCCTACAGGC CTCTAACTGG AGGGGGTGTT GGTGATCAGG
57451 GCCCTGGCTG CTGCCCTGAT CTCCACAGCT GGGCTTGAC TCGGGTACG
57501 TTGCTCCCGG GTGCTCCCA GCCAGTGTCT GTGCGCAGCA AGGATACCAC
57551 GGCAGGATTG TTTCTGGGAG ACACAGGACT CCTCAGACAG CTAACTTCAG
57601 CTCAAGAACT CTTTGATGGG CTTGCTAAAC TTCCTTAGGC TGGAAGATGC
57651 TTACCTCCTC CTTCTCTCTT TCCTTCCTTT TCCAGGGGTC AGACTTACTT
57701 AGAGTCTAGT GGCTGTCTA GCCTCCCCAA CTCCCTATCA TTTTCTCTCA
57751 CACATGCGTT CCCCTAATA AAATCCATGC ACATTTAATC CCTTCTTGGC
57801 ATCTGCTTCT CCGGGTCTCA CCTGGACTCA TGCAGTGTGA TAATTCCTTG
57851 TAGTGAGGAC CGAATGTAGT GATGTAAGCA GAGTGTGTGT CAGAGTGACA
57901 GCATGAGTAA GTGCCCAGTA GGCCATCAGG GCTCCTGTCA CCTTCACCAC
57951 CATCAGCACC ACCATCCTCA TCACCATCTG GCCAAGTTTG CTTCTTTGTT
58001 GGTTCCAGGC ACGAGAACTC CAGTGGTTGA TTCCAGGTCA TGAGGCAACT
58051 GTATTAGGGT GAGAACAAC GTGGCTTCTA AGGAGAATAA ATGGATTAAT
58101 GAAAATGCCA TTTAAAAATT TATCCAAC TTGGCTGATGC GGTGGCTTAC
58151 GTCTGTAAAT CCAGCACTTT GGGAGGCTGA GGCGGGCAGA TCACCTGAGG
58201 TCAGGAGCTC AAGATCAGCC TGGCCAGCAT GGTGAAACCC CGTCTCTACT
58251 AAAAATACAA AAAATCAGCC GGGCATGGTG GTGCACGCCT GTAGTCCAG
58301 CTACTTGGA GGCTGAGGCA GGAGAGTAGC TTGAACCCGG GAGGTGGAGG
58351 TTGCAGTGAG CCGAGATTGT GCCACTGCAC TCCAGCCTGG GCGAGAGAGC
58401 AAGACTCCGT CTCAAAAAAA AAAAAAGAAA AAAAAAGA AAAGAAATTA
58451 TCCAACCTAA GCACAATCCA GATCCTTTT TAGCCATTGA GATGTGCAGT
58501 CTTCTTTGCC AAAACAACCA AGTCCCTTT TAGTGAAATG CACAAAAGGT
58551 TTTGTAACAT TCTGAGATCT GTGCCGGTAC TCCTGACAAC TACAAATATA
58601 CTCCAGCCAG TAGACCAGGG CTGCTCATTT GCTGTTCTCTG AGAACCTGT
58651 GGACGTTTAG AAAAAAGAT GGCTGCTATT ATTCACATTT CACAGTAAGC
58701 AAACAGAGAA ACTAAGTGAC AGTTTCGAGG TCATGCTGTC ACTGATGGAT
58751 TTGGGACTGA AACTCTGGTT TTTGCTCTGG TGCTTTGGAA GCTCAGGCAT
58801 GGGTGGATTG TTTTCAAACT CTGCCCTAAT GGACAGTCTC TTCGCAAACT
58851 GGCACCAGGA CCTGGCCTGA AGAGACGTTT CTCAAGCCCA ATTCTGCCCA
58901 GCCTCAGGGA TGCTAGAAGC TTGGGAAGCA TCCATGATGC AGGTCACTGA
58951 CGGAGTCCAG CCTCCACTCA CCTCCATGCT CATGCTATTT ATTGCATGTC
59001 AGCTGATGAG GCTTTAAGCT AATGTTGGTT ACCTGGTGCT GTGGAACATG
59051 TTCCTTAAGC TGACTGGCAA GCCCCTGAGG CTGGGAGGGA CTGTGCCTTA
59101 TCCCCACCAT ACCACACCCC TTTGTGCCCA TTCAGCATTA AATAAATGTT
59151 TGTTTTTGAG AGTGCTGGTG ATTCCGATGG GGCTTTTG TGAAAGGAATT
59201 ATCACCACCA CCACCACCAC CACTGGAAAA CAACATTTGC TCTATGCCAG
59251 GCACTATGCC AAGAAATGA GATCCAATGA TTAAGATG AACTTTCTGA
59301 CTCCAAGAAG TTGATAGGCT AGTGGGGAAG ATCAGCACGC TGGGCCTGCC
59351 TGGAAGAGCC CAGGACGACT TCATAGAGGA GGTAGCTTTT GGCTGAGACT
59401 AAAGAGGATG GGAGTTTTCC AGGCAGATGA GGGTGGGGA GGGTTACTG
59451 GCTGAGAGGA CAACACCTGC AAAGGTGTGA AGGTGTGAAC AGAGCACTGC
59501 TGTGTTTGAG GACCTGCTTT CAGTATTGCT GGAGTGCCAA ACTGTTTGCC
59551 ATTTGACGCT GCTCATCCAC GTTGTCTGTG TGGTTTGAT GTGCCAGCAT
59601 TCCTTCCACC CTTTATTCAC TTATTCCACC ATCATTGATT GTCTACCCAC
59651 CATGTGCCAG GACTGTGCA GAACACTAGG GGTGCAGAGG TGAGGGGTAG
59701 ACAGGGTGCC TGCCCTCATG GAGCTTTCAA TCTAATGGGA GTGCTGGACA
59751 AGGGCACAGG CTGTATCAGC AGCACAGCAC AGTGAGTGCT GGGCAAGGGA
59801 GATGTATTAG TCTGTTTTCC TGCTGCTAAT AAAGACATAC CCAAGACTGG

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59851 GTAAGTTATA AAGGAAAGAA GTTTAATGGA CTCACAGTTC CATATGGCTA
59901 GGGAGGCTC ACAATCATGG TGGAGGGTAA ATGAGGAGCA AAGTCACATC
59951 TTACATGGCA GCAGGCAAGA GAGCATGTGC AAGGGAACCC ACCTTTATAA
60001 AACCATCAGA TCTTGTGAGA CTTATTCACT ATCACGAGAA CAGCACGGGG
60051 AAAAACCTGC CCCCATGCTT CAATTACCTC CCACGGGGTC ACTCCCCCAA
60101 GATGTAAGGA TTATGGGAAT ACAATTTAAG GTGAGATTTG GGTGGGGACA
60151 CAGCCAAACC ATATCAGGAA ATCTGAACTA ATGGAGGGCA GATTCAATTC
60201 CTGGGGCTTC CGTAGCAAAT TGCCACACAT GTAGTGGCTT AAAGCAGCAC
60251 TAATTTATTA TTGTATGGTT CTGGAAGTCA GAAGTTCAA ATCAGCCTCA
60301 CTTGGCCAAA ATCAAAGAGT AAGCAGTACA GGTTCCTTCG GGAGGCTCTA
60351 GGGGAGGATC CTTCCCTTGC CTTTTCCAGC TTCTAGAGGG ACCACATTCC
60401 TGGGCTCATG GCTGCATCAC TCCAACCTGT GTATCTGTCC TCACATCCCT
60451 TCTCTCTCTG GCCCTCCTGC TTCTTCTTA TAAGAACTCT TGTCAATATA
60501 TTGAGCCCAA CCATATAATC CAAGATCATC CCCCATCTCA ACATTCTTAA
60551 TCACATCTGC AAAGTCCCTT TTGCCATGTA AGATAACATT CATATATGTC
60601 TTGGGGATTA GGATGTGGAC CTCTTTGTGG GCCATTATTC TACCTGCCCC
60651 CAAGGCAGGA GGGGAGAAGG TGCTCCCAGA AGTGATATTT AATATGAGAT
60701 TTCTGGCTCA GAAGCAGGAT ACACATGGAA GCAGGGAGGC CCCTTGGGAG
60751 GCTGCTGGGC TGGTCCAGGC AAGATGTGAC AGTGGCCTGG ATGAGGCTGC
60801 TGGCCACAGG GGTAGGAAA GGCCCAAGGG ATGAAATACA GTGATAGGGC
60851 AGAATGAATG GGAGATGTGG GCAGTGGTAA AAGAAAGCCA CCTTAGGCAA
60901 GGCTCACCTT CTCGGCATCA ACAGGAGCAA GGGGGAAAGT GAATGCAGCG
60951 TCTTTAGGGA AAGGTTAGCA AGAACATAAT GCCCAGTTG CTGATTCTAA
61001 CATATAGATC TTTCAATCAA GATTCCAGAC AATTTTGCGT TTGTGTAAAT
61051 CTGAGGGAAA TTTAACATGG AGTGATTTTA TTGGATTGGA TAATATGCCA
61101 TAAAAGACTG ACGTTCAGCT CGGTTTCCAA AGACAGAAAC TGATTCCGAG
61151 GGCTTAGGAG GAGAGGCAGA TGTTTACAAA CTTAGATTCT TCTAAGCCAT
61201 CACCTCTACA GCCAGGTGTT TTGAACAGGC AGTGACATAG CCTGCTCTTT
61251 GACTTTTCCA ACAGTGATTG AGCAGTTTAA CTCCCTGCTG GAGTGGGACT
61301 GTTTACCCCA CTTAGGGTAA TTAGGTTTAT CATCTACTAA TACCTTCTTC
61351 ACACAACAGC CAGCCTGCAC CATGACAGAG ACTATAATAA GAGTTGGAAT
61401 AATAAAGGGA GAACAAAACCT GAAGTGCAGT GGCTGTTCGT TGTGACACAA
61451 GACATTTCTG TGATGCATGA TAGCATTGCG TGTGCGTCAT AACCCTAAAC
61501 TTCCTGCCAT CGCAGAAAAG CCTCCAGCTG AACCTATTTA TTTCCAAAGT
61551 AATGAAATTG CCCTACAGAG AACAGGGACC TTAGAGAATT CTATGTGCTT
61601 CGAAAACCAA GAAACAGTTT TTTTCCAATG ACGTCTTATT GGAAACAAT
61651 AGAAGAAAAA TTTATTACT AGTAGATCAG GAGTGGTTAT GCCTAAGTCA
61701 CATCTTCTAT TAAGATATAA CAAGCTCATC CTTTTTTCCT TTGTTTTGTG
61751 ACAAGAGGAC TTTTAAAGTC TCTAGACATT CATCTCTTCT CTGCTGTTGG
61801 TATCACCAGC CTTTGGTGCT TGGATAGAGT AGTTGGTTAT CCCTCTCCTA
61851 TTTACTTCCT CTCCAAGTTC AACAACATGT TTGTTTTTAA ATCTGATGAT
61901 TTGTTGTATT CTTTACACAT TGTTTCAACA AGGAAGCTAA GGGAGGAGGT
61951 GAATTATAAA TGGCAGAGAG ATAGCTTTCA ATTTGGACCC TCGTAGAAAA
62001 ATGTAAGTAT TTCAAACCTCA GTTTTACTTT TTTTTTTTTT TAAACTGGGA
62051 CCCCTGGTGC TTATTTTTTA GAACTCAAAT GGGTACCTAG CAACTGATCA
62101 AATTCCCTAA CTGCAGGCTT GGTGAACCAG CGTTTCATCC TCACATTGTA
62151 AAGCTGGCTC AAAGAAGACA TCTGTGCTTT GTTTCTGACA CGTTTTGTAT
62201 TTATTTATAA ACAAACTCTC TTCTTCTTTG TCCCCACCC TGACTCCTCA
62251 GTGGCCGTTT CCGCAGCAGC ACCGGTGTGC CAGCCCAAGA GCGCCACTAA
62301 CGGGCAACCC CGGGCTCCGG CTCCGACTCC AACTCCGCGC CTGTCCATTT
62351 CCTCCCGAGC CACAGTGGTA GCCAGGATGG AAGGCACCTC CCAAGGGGGC
62401 TTGCAGACCG TCATGAAGTG GAAGACGGTG GTTGCCATCT TTGTGGTTGT
62451 GGTGGTCTAC CTTGTCACTG GCGGTCTTGT CTTCCGGGCA TTGGAGCAGC
62501 CCTTTGAGAG CAGCCAGAAG AATACCATCG CCTTGAGAAA GGCGGAATTC
62551 CTGCGGGATC ATGTCTGTGT GAGCCCCCAG GAGCTGGAGA CGTTGATCCA
62601 GGTGAGCAGG AGCTGAGTCC ATCTTAGGCC AGCTGGTGGG GTGGATGGCA
62651 GTGTTGTTT TATCTTTCTG GGTCTCTAGT CTTGCCTTCA GTTGAGAGGC
62701 TCTTGGTGGT CAGGGAAGTT CTCTCCAGGG AGGTGACATG TGAGCTGAGA
62751 CCTCCAAGAA GCGATAGTGA GGCATGTGAC AGTGTGGGGG AAGGAGGGTC
62801 CATGTTCTGC ATCTGGTTT GGATGAGTGG TCAGAGGCGG CAGCAGGCCA
62851 ATGGACTTTG GATTTTCAAG TTCAAGTCCA CCTATGTGTG CTGATTAACT
62901 CCTTGATTCT GAACTCTGTG GAATGCTGGG ATAGAACCCG AAGAAGGAAA
62951 GAATTTTAAA TATGCAGATT TAGAATAAGC AGGGATATAT TAACCTGTCC

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63001 AAGGTCCATG AGGATGAGGT AGAGAAGAGG CCACCAGGTA TGTGGGTGAA
63051 GAGGCTGTCA GTGGCTGAG ACAGCTGTTA TAGTGGATTT ATGGGGATGA
63101 AATAATATGG ATCACAGTAG TAGTAATCAT CAGGTTTGCT GTTTTTGAAT
63151 ACTTACTGTG TATCAGGCAC TGTACTAAGG CCTTTACATA CCCTGGATAT
63201 TAAGGAAAAA AGATTCTTAG GAAAAATGGAA GCAGAGAACT TGAAGTGCAG
63251 CCTAAAGAAG CAAGGCAACA CTTCTGGGCG ACAGATGTGG ACTTGGCAGG
63301 GGTGGACTGT GGCGGTAAGG AGCTATAGGA AAGCCAGAGA GTCATCTGTG
63351 GGGCTGCGGT GCGAGGGAAGT GGATCAGGAG GGTGTGAAG TCTGGGAAGC
63401 CAGAGAGAAA AGCAGTTCCC ACGAGGAAGA AAGGGAATG GTGGAGAGCC
63451 CTGTTGGAGG GCTTACCTTT GGACGTGAAG GAGGAAGGCT GCCTCTGAGG
63501 CTGAAGTCTC AACTTCTATC CCAGACACCC TCCTGAACTA CAAAGAGTGG
63551 GTTTTGGTGG AAGGCGGTGA CATTATATGA GGTGAGGGAG AGTCTCATCT
63601 TTCTGGGGGC TCTAAAGTTT GGAAGGTGGA GGGATGAAA AGACAGCTTT
63651 TACAATTCCT TCTGGCTCTG GAAGATGCAC ATTAAATCT AATGGCTGCA
63701 ACAATCCAAG ATAGTGTAGG ATTTACCAGT CTGCGCTGTT TTCTTATTTA
63751 TTTATTTCTT ACCATACCAA TAGAGTAGGG GAATTCGTAT GCTGCTTATG
63801 ATCTGGCACC TTCATAGCAA TCATATTCTT GTCAGTTAGT TTTAATAATG
63851 ACTTGACTCT TAAATAAATA GAAATACAAA TTCTTCCCTT CCTGGGAGTA
63901 AATATGATTT CATAGCTATG CCCTATAATT CTTCTCAAAA AAATAAAATG
63951 TTA AAAATCC AAGGGCAGCA TTTCATATAA GTGTTTCATA GGAAGTCAGT
64001 TCTCCAAATG GCTTTGTCTT TTTTTTTTTT CTTTTTCTT TTTGAGACAG
64051 GGTCTCATTC TGTCACCTAG GCTGGAGTGC AGTGGTGTGA TCATGGCTCA
64101 TTGCAGGTTT AACTTCCTGA TCGAGGTATC AGCTGATCCT TCTGCCTCAG
64151 TCTCCTGAGT AGCTGGGACT ACAGGCATGT GCCACCATGC CTGGCTACTT
64201 TTTGCAATTT TTTGTAGAGA CAGGTTTTCA CCATGTTGCC CAGGCTGGTC
64251 TTGAATTCCT AGGCTCAAGC AATCAACCCG CCTTGGCCTC CTAAAGTGCT
64301 GGGATTACAG GTGTGAGTCA CCACGCCCAT CCCTTTTCTT CTTTCATGGG
64351 AAAATGCTAC CACATTGTG GTGATGAGAT TTTTGTACTA ATCAGTGCCA
64401 GATTTAAAGC CTAGCATGCT ATAGAGAATG GAATAAACAA TTCTGGAGTA
64451 GTTTTAAAGT GGAGTATAAT TACATTTATA CACATTGTTG TGATATGAGG
64501 TAGGATCCCT TTTAATTAGT TGTAAGACAC GTCATAATAA CCTGATAGGC
64551 GTTCTGAAGT GAATCTAGTA TTGTGTTTGA ATTTTCTTTC ATTAGGCAGT
64601 AAGATCTTGA AGAAAAGGAA TGCACGTGTG TACCTTTTCC TCCACATGTG
64651 ACCTATGCTT TGCTTTGCCT CTAATTATG CCCATTAGAT AAATGTTTTT
64701 AGAGCAAGAT ATCAAAGCAA ATTGTAGAAC ACTGGTGTAG TCACAAGCTA
64751 TCTGAGCTTA TCCATGCATT TGTTGATTAA TTCGGCATTT CCGTATTGCC
64801 CATTCTTTAA CCCTCATCTT TATGAGAGAG CTCAGAGACC TGAATGAAGG
64851 ACAGGGTCAG AGAGCGTGA GGTCCCTTATT CTGATGCTGC CATTAAAGCT
64901 GGTGTCCTGT TTTGACCTCA AAGATTTCTC TGTGAAATGA GATATGTGTG
64951 TGTATGTGTG CGTTTGTGTG AATGTGTTTG CACATACACA CGTGTGTGCA
65001 TTTAAGATAA TTTTATAACA ATTTAAAAAG CTGCTCTTTA TTAGGCATCT
65051 GTTATGAGCT GGGCATCATA TACCCATTAT CTCATTTAAT CTTATCAACA
65101 ACATCTAAG TTACATACAC GATTCCCATT TTACAGGGGA GGAAACATCA
65151 GTTTCCTTAA AGAGGTGAGT AACTTTCCAA CCACCAAAGT GGTAGAGCTG
65201 GTAGTCAGCG CAAGGTTGGA CTGACTGTAC ACTCTCTCAT CCAAATAGTC
65251 TACAGGCCCT TTAAGTAGAT CTTGGTTTAT AATAAGCTCC AGTCTCTTTT
65301 AAACCTGTGC TTTATGTTGA ATGCTGTATT AGTCCATTCT CACTATAAAG
65351 AACTATCTGA GACTAAGCAA TTTATAAAGA AAAGAGGTTT AATTGATTCA
65401 CAGTTCCGCA GGCTGTGCAG GAAGCATGGC TTGGGAGGCT TCAGGAAACT
65451 TACAATCATG GCAGAAGACG AAGGGGAGGC AGGCATGTCC TATATGGCTG
65501 GAGCAGGAGG AAGAGAGAGC AAAGGGAGGG ATGCTACACA CTTTTAAACA
65551 ACCATATCTT GGCCTGGCGC GGTGGCTTAC ACCTGTAATC CCAGCACTTT
65601 GGGAGGCCAA GGTGGGTGGA TGACCTGAGA TCAGGAGTTC GAGACCAACC
65651 TGGCCAAACAT GGTGAAACCC CATCTCTACC TAAAATACAA AAATTAGCCA
65701 GGCGTGGTGG TGTGCACCTG TGGTCCCAGC TACTAGGGAG GCTGAGGCAG
65751 AAGAATTGCT TGAACCTGGG AGGCAGAGGT TGCAGTGAGC CGAGATCATG
65801 CCATGCACT CCAGCTAGG CATCAGAGCA TGACTCTCTC AAAACAAAAA
65851 CAAAAACAAA AAGCCAAACA AACAGATTTC ATGAGAACTC ACTCACTATC
65901 ACAAGAACAG CAAGAGGGAA ATCTGCCCCC ACCATACCCC TTCTCCTACA
65951 CTGGGGATTA CAATTCAACA TGAGATTGGA GCAGGGACAT AAATCCAAAC
66001 CATATCAGAC ACTTTCCAGA ATTTTAGCAG TCAAAAAGCA TTAGATGGCC
66051 AGGTGTGGTG GTTCATGCTG GTAATCCCAG CAGCTTGGGG GGCCAAGGCG
66101 GATGGATTGC TTGAGCCCAG CAGTTCGAGA CCAGTCTGGA CAACATGGCA

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66151 AAACCCCTTT GTACAAAAAG TTACAAAAAT TAGATGGGTG TGGTGGCACA
66201 CGCCTGAAGT CCCAGCTACT TGGGAGGCTG AGGTGGGAGG ATCACCTGAG
66251 CCCGGGAAGT CAAGGCTGCA GTGAGCCATG ATTGTGCCAC AGTACTCCAG
66301 CCTGGGAAAC AGAGTGAGAC CTTGTCTCAG TAAGTAAATC ATTAGAGTTC
66351 CTGGCTGCCT AACAGGAAGC ATTTCTGTTT CTTCTCCCTA TGCACATTGA
66401 GCATCAGTCC TGGACCTGGG ATGCTTTTAG ATCTCCATCT ACTATGACTT
66451 ACAGATTTCAT CTTGTGTGTT ATCTACAGTC TTTCTCACAA TATAAGTTAA
66501 GCAGGTTTAA CTGCTGAATC TGTGTCAAAT CATTGCACCA AATCATTACA
66551 TTTTGCCCTT CAGTTCACCTG ATACCTTCAC AAGGATGAAA GTGTCCACTC
66601 TTACAGACCA GGGAGCTTTC TCACACTTTA TGCCCTGAG CAGCACTGTA
66651 TGTAGCGATC ACAAGAAACA CAGTATTAA AAATAGTCTG TTTTCACATC
66701 TGGAAGGGTT TTCAGTGTGC TGTGTTTTAA GTTGGAAGA TAGTACTATT
66751 GTATCTCACC CAAGTCTGAA AGGAGTGACT GGAGAGTAGA AAGTAGATGG
66801 AAAGTATTTA TTTTCATCATG TCTCTTGGCT GGATTGAGTG AACCCCTCAT
66851 AAAGCCAAAGC TGGAATGTGT GCTTCATATT ATTAATAACC AAAATAGAGT
66901 ATCCAGAGAA GCATGATACC CTCAAAATGC CTGGATAGCC TAGAAGAGCC
66951 TTAGCTCTTA CAGCCATCGT GGGGAGGGAT TTTCCAACAA GTAAGACCAC
67001 TTCATGGGT ACTGTGGGAC TCCAGAGGAG AGTAATGGGC CACTATCCCT
67051 AAAGGTGAAG AAAGATGGGT TGCTGTTATG AAGGGGACAT TCTCATCCAT
67101 TCATTTAGTC ATTCATTCAT CTATCCATCC ATCCACTTGT TCTCAGAATT
67151 GCTGCTGAAC TCCTGCATGT ATCAGGTAAC ATGCCAGGTG TTGGGGAGAG
67201 AAAGAAGAAG ACACGGCCGG GTTCGGTGGC TCACGCCTGT AATCCCACCA
67251 CTGTGGGAGG CCGATCAAG CGGATCACGA TGTCAGGAGT TTGAGACCAG
67301 CCTGACCAAC ATGGTGAAAC CTTGTCTCTA CTAAAAATAC AAAAATTAGC
67351 TGGGCGTGGT GGCAGGTGCC TGTAATCCCA GCCACTCAGG AGGCTGAGGC
67401 AGGAGAGTTG CTTGAACCTG GGAGGCGGAG GTTACAGTGA GCTGAGATGG
67451 TGCCATTGCA CTCCAGCCTG GGCAAGAGAA TGAGACTCCG TCTCGAAAAA
67501 AAAAAAAAAA AAGACTCACC ATAAGCAAGT TACTCACCTC TTGTTTCTTC
67551 ATCAATAGAA TGTGGCCTCA GGGTGTCTGAG AGGATTAAAT GCAGTAATTC
67601 ATGAAAGAGG CTTTGAACCTG TGCTTGGCAG ACGGTAAATG CTCACAAAAG
67651 GATTATTATT GCTGCTTCTA TTGCTGTCTAC TGTTCTTTAT ATTATTGAGG
67701 GAGCTCAGAT TTTCAAGCAG TGGTCTTAA TGGGATGGGG TGGGGTCACC
67751 GGGGAGGGGA TGGTTGCCTC TAGGGGGCAT TTGGCAATGT CCGGAGACAT
67801 TTTTGGTTGT TACAGCTGGG GAGGTGCTAT AGACATCTAG TGGGTAGAGG
67851 CCAGGGTTGC TGCTAGACAT CCTACAATGC ACAGCATAGA CCCCCCTCC
67901 CACAAAGAAT TATCCAGTTC AACATGCTCA TAGGTTGAGA AGCACTGGAG
67951 GAAGAGGCAT GTAAGCCAAT AATTACAATC TTTTGGAATA GAGCTATCTG
68001 AAAGACGTCC AAAAAATGGA GCCCTAGTGA GGCAAATAGA GCTCAGAGAA
68051 TATTTTGTGG TTATTTATCT CTTTCAGTCC CCACAGCTGT TCTGTGAGGA
68101 TAATCTTTGG TGCCCACATA CAGACGAGGA AATGAGGCAG CAGGAGCTGA
68151 AATGATGGCT TAAGTTCACC TGGTTAGAAA TGGAGGATCC AGGGTTTACT
68201 GCCAGGCAGT CTGACCACAT ATCCCAGGCT CTGAACCACC ATGCACTGGA
68251 ACAGAAACAC GATATCTGGG AGGGAATTCAT TGGGTAGGCT ATGGTTGGAG
68301 GGTATCCCAA TGGCTGGCAT GTGGCCCATG GGAAATGCTT AACAAGTTTG
68351 TGGTGACAAG AATGTTATAC TAATCAGTTC CAGATTTGAG GCATTGAAAG
68401 TGATCAGAAAT GGCTTGAACCT GAGAAGTATG AGAGTACGTG GAAATGAGAC
68451 TGGGAAGGGG GTCGTGGGAG CTGGGCTGAG GAGGTGCTTA GAGGACCTTT
68501 ATGTTGTGGA ATGTCGAGTC ACTGAAAGCT TTAAGCGAGG CTTGGAAGAT
68551 GGAAATTGGC TGCTGAAAAA ACCTTTTAGC AATGAGGAAG TTGGGTTGGA
68601 GGAAGGAGAA ACGGGAAGAA GGAAGACCAG TTAGAATGTT GCAACATCAC
68651 AGGTGAGGGA TGCTGAGAGA TAGAGAAAAG GCTATATTTA AGAAAGTTGA
68701 CAGAGAAAAC TTGAAAATTA CTCAAACCTG ACTCAGCAAA GATTTCTGCT
68751 ATGTGCTGCA TATCCCTGCA TGGCCTGTAG CCCCCAAGAC TCGGGGGTTA
68801 ATCTCCCCAC GTTAAATCCT ATACCACTTA ATGAGCTGAG TGAATTGGGC
68851 AAATATCATG TTGCCCCGGC CTCACTGCTC TTCTGTGAAA TGGAGATTGC
68901 GATCACGGTG TCTACCTGTT AGACACTATG GTGGTCTGAG GATTAAACAA
68951 AAGAAGCTCA GTAACCTTGA GCTCTTGTTA TTGCTGCTGC TTATTTGTTA
69001 GGGAAGGAAG AAAAAAGAA ACCAGAAAAC TCCTAACTGA TGCGCATCGT
69051 GGAGTTCTGC TGAGGGAAAA GAGAAGAAGG TGTCTGAAAT GACTCTTGGG
69101 CTTCAAACCTC TGGATTTTCT CATAGAAAAA TTTTATTTCT ACTGTTCAAG
69151 TGCAGAGTGC CCATCACAGA AGTCGCTCCC AGAGTGCTAG GCTGGGCTGC
69201 TCACACCATG ATGCTCTGTC TTTGTGGCTT GAGCTCAGGG AATCAGCACA
69251 GCAAGTTGCT ATTCATTGA GAGGGTTTAC TGTGGGCATC TAGAATGTCA

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69301 TCTTTATCCT TCGTCTTACT GGAGACTGTC AGTCTCACAT TTATTAAGTA
69351 GACACTAGGG CCGGCTCCAC TGATCTCTCT CCCCCTGCT TCTCTGGTTT
69401 GAGGCACAGT TTCAGAGAAC CTGAGGGACC CGGTGGGCTC AGGCGGCCTC
69451 AAAGCAGCAG GTCACCTGAC CAGTGGAGTG ACCACAGATT CCAAGGTGTG
69501 ACCGAGTGAA AGGGCTTATA TCCCCAATGC CTGACTGCAG TTAACCCTA
69551 ATGAGGTATG TGGATCTTCT AGAGGAAGGG CCAGGCCCTT TTAATAAGGA
69601 CCCTTCTGAA CAAAGAGACA AGATGCTAAT CCGAATTCCA CTAGGACCAA
69651 GTTTGATGTC CTAGGGCCAG CCGCTTAACC CGAGCTGGGG CTCAGCAGTT
69701 AAGCACATAG AGGACACAAA AGATGCATCC GTCTCTAGAA TCTTACCCCT
69751 GAGATGTGAG GGAGTGTGCA GACGATTGTA AATGGGTAAC TTCCTGCAGA
69801 GCTGGTGTA TAATAAATA TAGCTACCAC TTACTGATTG TTTACTTTCC
69851 TCTAGACTCT GTTCTAAGTG CTTGAATCCT CTAGCTCATT TAACTCTTGC
69901 AAGAAGCCTA CAAAGTAGGT ACTTTTTTTT ATTCCTTTT TTTAAACAG
69951 GGTCTTGCTC TCTTACCAC ACTGGAGTGC AGTGGTGCAA TCATGGTTCA
70001 CTGTAGCCTG GAACTCCTAG GCTCAAGCAA TCCTCCTGCC TCAGCCTCCT
70051 CAGAACGTTT CTGGGGGTAG GTTGGTCCAA TCCCCTCAGA GTGAGCAGGT
70101 TATCTCACTC CTGGAAGGC TGGCTTCTCC CCTGCCTCTC TTCGGTGCTT
70151 GCCTCCAGCA AGTTACTGAA GTCCTCAGAG GCCTCTCCAC CGTGAAATGG
70201 AACTGTCTG TCTGTGGGAC TACAGGTGGA TACCACCAGA CCCAGCTAAT
70251 TTTTAATTTT TTTTTTTTTT TTGGTAGAGA CAGGGTCTCA CTGTGTTGCT
70301 CGTGCTGGTC TGAAACTCCT GGCCTCAAGC AATCCTCCCA CCTCAGCCTC
70351 CCAAAGTGCT GATATTACAG GTTTGAGGCA CCATGCCCAG TCTGAAGTAG
70401 GTTCAATCAT CATCTCATTT TATGGATGAG GAAATAAATC CCAAGAAGTT
70451 AAATAACTTG TCCAAGTCCA GACAGCCAAT AAGTGATTAA ACTTGGATTT
70501 GAGCCCTGGG AAGCCAGACT CCAGAGCCCA CACAACGAA CCCTTGCGCC
70551 ATACTGCTTA CTTGCATCAA TGGTGAGTAT CCCCTCACTA ATATGTAGAC
70601 CTCTTCATAA AGCTTTTACT CCAAGGAAAA GGCTGGAGGG AGAAGGAAAC
70651 ATGATTCAAG AAACCTGGCT GTCTGGCATG GTGCTATAGC ACTCCACGTG
70701 GGGAATATTG TGTTTTTCAA GAAAGGTGT GTTAGAAGGG GAATGATCAT
70751 GGAGTAGTAT TCAGATAGAC TTGGTCCCTC AACACCACTA AACCTAAGGC
70801 CCCTCCTCAT ATTAAGGGA TCACAGTCCCT CATTAGGATG ATTGTGGGGA
70851 GTGAGTGAAC CTAGCAGAGT GCCTGGCATG TCACTGGCAT CAGGAAATGC
70901 TATTTCTTTC TCCCACCCGT CTTTCTTCTC TCAAGCGAAC TGAGTAGACA
70951 AAGATAATTA TACCTGGAGT ACTTGCAATT CTTTGGCAGT AGAATAAAGT
71001 AAATTTAAATG TATTTTGAAG GTTGAGGTTT CCATGAACTT GATTTGCGCG
71051 TCACTGTGTC CCAAGAAAGC CTTTATCTTT GACGTCCTCA CATGCCGCAA
71101 TTGCTTATCT CCCTGTTCCC AGTGCAATTG TCTTAGAAGC TTCTATACTG
71151 ACTAGTCTTG GAGAAAGCCA TAAACATTC CTCTTTTGTG ATCCTCAAAG
71201 AATAAAATCG TGAGGAGCCT TCGCTGACTG ACGGGGAAGT GTAGAATGAA
71251 TGCTTCGGTT TGCAGGGATG ATCATTGGCA GCAGTCTTTT TTCAGGTTAT
71301 GAATTCGAT GTTTCCCAGA TGTTTGAAGA TTTTGAGTGT CTTCAGGGGA
71351 GCTCGAGTGG TCCCATTGGCT GCCATTTCTT CTGGTCATAG CCTCGCTGAA
71401 GGGAATGACA TTTACGGGA GTGGGTTTAG GGTTGGATGA GGCACCCATC
71451 GGGAAGGACA TGGGATTTT CATTCTAAGT GCCTTGCCAT AAAGCAAACG
71501 ACAGGGGTCT ATTCTCTCT CTCTGGAGAA TGTTTCTGGG GGCAGGTTGG
71551 TCTAATCCCC TCAGAGTGAG CAGGTTATCT CACTCCCTGG TAGGCTGCCT
71601 TCTTCCTTGG CTCACCTCAG TCCTTGCTC CAGCAAGAGG GGTCTCTCCA
71651 ATGCAAAATG GTCACGTCT GTTCATGATA GTTTTTCTGT CTGAAGAAAG
71701 TCCCGGGGCC TTCATCTGCA TGGCTGGGGC TAGGTCTGGA ACTGCCTGGA
71751 GCATGAGCCT TTTGGGGGT CTCTTCCAC CTGCTTTGTC TCTCTCTCTC
71801 TCTCCCCCTC ACCCTGACTG GTCCAGTGAC TCTTTATGTT GGTGAACAGA
71851 AACTTTACCA TTGGTTTTCA CTTTATGACG TCTATGGGCT TCCCCTCTCT
71901 GCCCCAAGA TGGCGTCTCA CTCTGTTGCC CAGACTGGAG TGCAATGGTG
71951 AGATCTTAGC TCACTGCAAC CTCTGCCTCC TGGATTCAAG TGATTCTCCT
72001 GCCTCAGCCT CCAAGTAGC AGGGATTACA GGCTACTTCA CCACCCAGC
72051 TAATTTTGT ATTTTGTAGTA GAGACAGGT GTTGCCAGGT TGGCCAGACT
72101 GGTCTCAAAC TCCTGACCTC AGGTGATCTG CCCACCTCAG CCTCCCGAAG
72151 TTTTGGGATT ACAGGTGTGA GCCACTGTGC CGGCTAAGGA TTTTTTTTTT
72201 AATCCTTTCC AAATAGAGTT TCAGATACTT TGCTCAGTAC TGTGTTTGAT
72251 GAGTATTATT TGGCAAGATT TATTATTTT TCATTAAAAA ATTAATAAATG
72301 ACCTATAATA ATTGTATGTA TTTATGAGGT ACCTCGTGAT GTTTCATAC
72351 CTACAATGTA TGATGATCAG ATCCGGGAAA TTAGCATATT CATCATCTCA
72401 AACATTTATC ATTTCTTTGT GTTGGGAACG TTCAATATCC TCCTTTTAGC

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72451 TATTTGAAAC TATATACTAG ATTATTGTGA ACTGTAGTCC ATCCTGCAGT
72501 GGTATAGAAC ACTAGAATTT ATTCCTGTGA TCTTGCTGTA ATTATGTCCC
72551 GTTTAACAAA TCCTTCCCTA TCCTCTGCTC CCCTGACTCT TTCCAGTCAG
72601 CATTATTAT TAGGCACTGA TTCTGTGCTG GCTGGGTGCT AGAGAGTTTA
72651 CATATATTAC TTAGCTTCAT TTGCCTCTCT CCATTGCACC AAGAGGCGGC
72701 CACTGTTGCT GCCCCATTTT ACAGAGGGTA AAGTTCTTGC ATCTAGCTAG
72751 TGACCAAAGC AGGACTTGAG TCTAGCTAGA TCTCTCTGAC TCCAGAGGCC
72801 ACGCTCTCTT AATCGTACTC TCCTTGGCTT GACACGGTGG GCTTAGAGAG
72851 TACATAATTG GATCAAGACA AATTCCTCCT GACGAAGGGA AAACCCACTC
72901 AAACAACATG ATGACGAGGC TCCTTTGTGA CAGTTAGTGC TTGCCTTCTA
72951 ACGCAGAGCT CTCTCTCCTG TCCTCTTCCT GTATTTGTAA CCTTCTGAC
73001 ATACAGAGAG CCTGCATGAC AAGGCTGGGG TGCCAGATTG TTGGCCTCTG
73051 GCTTACTGAC TCATTTTATT GGCTGTGCGC ATTGGGCTTG ACTCTACCAT
73101 GTTTTAGTGG AGAAAGATTT AGTCTAAGAT GTGGGCAGCG GCATGTGAGG
73151 AGTGGGTATT GTGCTGTGGT CCTGGGTATG AACCTTTGAT GTTGTCATGG
73201 CAACCAAAGC TGCTATTCTG CAGATGAGAG GACTAGATAT TATGAAGTGT
73251 CAAACTGTTT TCTCCATAAC CAAGGAGATG TTGGTAATCT CCTTGGTAAT
73301 TTGCATGACC CATAAACATT TCCCAAGGCT GTGGCTCTGC CCTTCTGCCA
73351 AGACCCGAGT CACTCACTTG CTCACTCACT TACTCATTG CTCACTCACT
73401 TATTCACTCT TTCATTCAAC AAACCTGTTG ATTGCCTACT GTGCTAGATG
73451 CTGGGATGTA ATGGTGAATA AAAGACAGAC ATGGTCCCTG CCTTCTTGGA
73501 GCTTATAACT AGGATGACCA AATGTCCCAG GTTTTGTGGT TCTGGAGTAA
73551 TTGTTAATAG TGCCCCTTTC TCTCTCAGAA GTGTCCTGGG GCTGGGCGTG
73601 GTGGCTCATG TCTATAATCT CAGCACTTTG GGAGGCTGAG GCAGGCGGAT
73651 CACTTGAGCT CAGGAGTTTG AGACCAGCCT GGGCAACATG GCAAAACCCC
73701 ATCTATATTA AAAAAAAGT GTCTTGGTTT GAAATATAAA ATATATAGTG
73751 ACCCTACTTA TAGACAGTGG GAGAGCCAAA CCTTATGCAT GTTATTACAC
73801 AAATAATTGT AACTAAAAGC CAGATGAAAG TTGCAAAGGA GAGGGAGCTA
73851 GAGCTATGGG ACACCCAAAT AGGAGAACTG ATTTAGTAGG ACAAAGATTG
73901 CAGGCAGAGA GGGCTGAGTC AAGGCCCTGG ATGGGAGGAA GCAACATGCC
73951 ATGGCTGAGG ACTTGAGAGA AGTGAGCAAA TGTGGCCAAA GGGCATTTAG
74001 CAAAGGGAAC TTAGAAAGCA ATTTGGCTGG AGACAGGCAG GAGCCAAACC
74051 ACGCAGGTGC TGATTCTGAA TTTTATCTTA AGAGCACTGT GAAGCTTACA
74101 GTTATGTTTT CAGTAGCAGA GTGATATAAT CTGGTCAATC AGTACATTGC
74151 CATTTTGGTT CTTCGTATAA ACCCAAAGGG TTTTAAGTTA TTTGTTTATT
74201 AATTCAATAA ATAAACATTT ATGGAGTGGC AACTGTGGCA CTCTGCTAAG
74251 TGTTTTGCTC TGGAGTTCTG AACTCAATTG TCCTCAGTGG TGCCAAAACCT
74301 CAACTCTTGG GGGAAGCCTT TATGGGCCCT TTATGTTGGG TCGTGTCTCTG
74351 CTTGGCACCA TTTGCCCCCT ATTTGCTAGA CTCTCTTGAAG TGACCTTTAC
74401 TTTTCTCTGT CCTCTTTCCA TGACTGTGAG CTCTTTGAAG TTGAATCTAT
74451 GTCTTTTATC AATATATCCC TTCTGCCTGG CACAGTGGCT GGCCAATAGA
74501 AAATGCTAAA GGCTTGAGGA ATGAAGGAAT GGTGCTTTTT GTGTCTGACC
74551 TTTTTTTTTT TTTTTTTTTT TGAGACAGAG TCTTGCTCTG TCTCCACGGC
74601 TGGAGTGCCT TGGCATGATC TCAGCTCACT GCAACCTCCA CCTCCTGGGT
74651 TCAAGCGATT CTTCTGCCTC GGCCTCCCTA GTAGCTGGGA CTACAGGTGT
74701 GCACCACCAC GCCCAGCTAA TTTTGTGATT TTTAGTAGAG ACGGGGTTC
74751 ATCATATTGG CCAGGCTGCT CTTGAACTCT TGACCTTGTG ATCTGCCAC
74801 CTCGGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC TGTGCCCAGC
74851 CTTTGTATCT GTTTGAAGAC CAAGAGCCCT TCATTTAGAA CTTTCACAGA
74901 AGGAAAGCAA AAAATTCTTT TGTTTCTGTT TTACAAGTCT TTTCTTTTGT
74951 GTCTGGTTGT CAATAGTACT TCTCTGGATC CGCCTCCTGT ATTCAAGTGA
75001 TTTTCTGTG TCAGCCTCCT GAGAAGCTGG GACTACAGGG GTGTGCCACC
75051 ACACCCAGCT AAGACAAAAA CTCACCTTGT TGTCTTCTTT ATGCATGAGC
75101 AGATTCCCTT GGTATCTATA GCCGTCGAAG CTTTACGTAT TTCCCTATTT
75151 AGGGACATAA GAATTTTTAG GAAAGCAGCG TGTTGGAAAG CACGGCACCT
75201 GAGATGTTCA TGGAAATCCT TGTTGTGACT TCAGAGTGCA GATCTAGAGC
75251 AGCCCTCTGT TTGTCTGCCC TGGGCCATCC CCTATTTCAA GCAGTCTTTA
75301 GTCCAGGAAG TTTAGGTAGC AGCTCAGGCA GCAGGTGAGC TCTGGAGAGT
75351 GCAGGTTCGG GTTCTTTGAG CCCAGGGGCA CAACTCTGAG TTGAAGTGAC
75401 TCCTCCTGTC TGTTGCTTTG AATTTAGAAG AGCTGCCCTT TCACCAGCAA
75451 GGCAGTCACG CAAAAGATGC TTCAATGTGT GCAAGATCAG GCCTGCAGCC
75501 CCCAGCCTGT GTCTACAGGC CTCCGAGTCA TTATTATTAC GGTTTCTATC
75551 CCTGGGGTTA TTGATTTTCA CACTGTTTAG TGAAGGAGAT CTAAAGCTTT

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75601 TAAGCCAGAA ATTAAAGAGG TAATGGAAAT TGGCATGCCA CTGGAAAATG
75651 AATTTCAGAA TGAGAAATCA ATGTTCTAAA AAAACTCCCA TAAAAATAAA
75701 ACCAAAACCC AGAAGTGAAT GCTCCTGTGA CTGCATTTT TTCCAAATGT
75751 GCATGGGTTT GTTCTCCTTT AGAGTGTGGC TGTATACATT ATGGAATAAT
75801 GAGATTTTGA TGGTGTCTCG TTCCTACAAT TGCTCTTATT ACTTATCACA
75851 ATACAATGTA TTCATTTATA TAACTAATAT TTACTTAGTA CCTATAATGA
75901 AGCAGGTGCT ATGTTTGGCT CTAGCGATTA AAAACAATA AAAAAATCAA
75951 GATGCCTCCA CCCTGTCTCT AGGGAGCTTG AGGTTCAGTA TTAATTATAT
76001 CGCTAGCCAA TTCTGGCATG GTGCTTACTG TGGACAGGAA CTGCTCTAAA
76051 TGCTTACAGT GTAGTAACTC ATTTAAATTT TACATTGATC CTATGAAGTG
76101 GGGTAAGCAA CAGAGGAACA GAGAAGTTAA ATAACCTGCC CAAGCTGAAG
76151 TGAGAGGTGG AACTGTGATC CGGCCAAGGC AGTCCGGCTC TAGAATCCAT
76201 GGTTTTTAGC CATGATGCTC TACTCTAGTG GATAGTTACA GCCCAGTAGC
76251 TATTGGTTAC TAGATTGGTT CTAGAAGACA AGGAAGCACT CAGGTCCTTA
76301 GTCACAGAGC AGGAGTCTCT GACTCAACCT ATGGGACCCC CAAGAGGACC
76351 TTCATTACAC TGTGAGTCAA CTGCAGAGAG TCGTGATTAC CTCCTGGTTG
76401 TCCTTTAGAG TGGCAGGCTT TTGTGTCTTA ACATAAGGTG TTGAAGCTGG
76451 GTCACCTTT TCGATCTAAA ACCAATGTCC ATGGGTTATC ATTCAGGTCT
76501 GCAATTAAGA GTAGCTTGTC ACTTTATATT GGGAACATTT ATTTTTCCTT
76551 CTTTCTCTAT GGAAATGGGC AGAAGAGATG AAAAGCCTGC TGGTGCAGCT
76601 TAACCTTCTC CAGTAAGTGA GTGTTTAAAC TTTTGTTTT TTA AAAATGG
76651 AGATGAGACA TACAAATTAT GACTTCTCTA TGTTGTCTT TTTTCTAGTT
76701 GGAAGAAGGT GACATGACAG ATGAGCTTTA GAAAAATGTT TAGAAGGTGA
76751 ACAGAGAACT ATTCGTGAAA GATAGGAGGC TAGAGTTAAA AGAGAGGACT
76801 TTAAACCACT CTCAGCTCTG ACACCTCCTA ACTACTATAA CCTCACAGGA
76851 TTTTGTGAGG ACTAAATAGG ATAATAAGGC GGAGTCTGCC ACATTGCAAG
76901 TGCTGGCAGC TATGATTAAT TTTAGGAGTA TTCTAGAACT TTCCCTGAAG
76951 TTTCTAGCAT TGTCTGCACT TCCTTGTTTC TCCCCTTATC AAACATGCT
77001 CAGGGAGATT TGGTGACTCA TTCTTAAGGA GGCACAGAAA ATGATTTTTT
77051 TTTTTTTTGG CACAGAACTT TGTTCTGTAA AGGGCAGTCT TGCTCTGTGG
77101 AGGCTGGAGT AAAGTAGCAC GATCATGGCT TACTGCAGCC TCTGCTTCCT
77151 GGGCTCCAAC GATCCTCCCA CCTGAACCTC CCGAGTGGCT AGGACTACAG
77201 GCATGCACCA CCATACCTGT GTAATTTTTG TATTTTTTGT AGAGATGGGA
77251 TTTTGCCATG TTGCCCAGGC TGGCCTTGAA CTCCTGCGCT CAAGCAATCC
77301 TCCTGTCTCA GCCTCCCAAA GTATGGGGAT TATTGGCATG AACTACCATG
77351 CCCAGCTGGA AATGAAATCT TAATTTGTGA TTAATATTGA TCACTCAAAA
77401 GCAACAAAGA CCCCAGGTT AACATAGCTAC AATAAAAGCA AGATAGCAGA
77451 AGCCTCTCTT TTTTCATGATG TTATTAATCA TCTAAATATT AAATTTCAGG
77501 CTCTGTTCAA TGCAATGGCA ATGGAAGGAA TAGTAACCTT CCATTTAGTG
77551 CACAGTGTAA TGAATCAGAA TTCTTGTAGC TGCTTTTGTA GTCCAGTACA
77601 GTTTTTTAAA AATAGAAATT GGATAGACCC ATTTTTTAATG GGAATGATCT
77651 CAAGTGCAGA GAGAGCAAGG CATATATCAG ACACTCTCCT CAGGACCAGG
77701 GCAATTTTTC AACATCAGTT GGCAAAATTG TTATTCTGCC TGTAGAGTGT
77751 AAGTCCAAAC TGAGATGAAA GAGTGACAGC TTGTTAGTCT GAAAGTTTAT
77801 TGATCATATC AAAGTATACA CATCTATCCC TGATTCCTTA GTGGACTTGA
77851 TACTTTCCTC GTGGTTTTAA ATTTGTCTTA TTTCATCCTT CCATGTAGTC
77901 AAAGAGAGAC AGAGGAAATG CATTTTCCAT CATAAGGCAC AATTTGGAAG
77951 CTACAAGAGT GCCCCCAAAT ATGGCCTGGT CTCATAAGAT AATATTTAGA
78001 TAGATTAGTC GTTAGTGAAT ACCCAAGGGG CTAATGAATT GAGTCTCAGA
78051 AATCCCCATT GTAAGGGATT AACTTGTAGT AGCAAGGAAA GCTAGCGTGT
78101 CTAAGACCAT ACGCCATGAG CAAGCATGCT AGCCCATCCT GGGTTTCTCT
78151 CTCCTCTTCT CCAAACAGAT TCTCCACTTG CCCTGTCTT TCTGCCAGTG
78201 GCCTTCACCT TAGATTTATA ACTAGGCTGT AAAGTTCTAA TGAAAACCTG
78251 CTGCCTGGCT CCCTGAGGAC CTGAGGAAAG GCTAATATTT GCACATAACT
78301 GGGTACTTAG GGCAGTAGGA AAATACACGT CATTGTAATA TCCACCACAG
78351 CACTGAAGGT GCCTCTTTCT TTACCTTTT ATGGTCTGGT CTGCTTTTTA
78401 TGAGGGACTC TGAGGTGGTG TGGCAGTTAG GAAGGCCACT TGATTGGGGC
78451 GTGTCCACTC AGGTGAGCCC AGGCTTGACT GCCATATTGG CTGTGTCTGG
78501 GTGGGAGGTA AAGGCACACG TCGCTCAGCC TGCATTCTCT TCCCTTCGTC
78551 CTATTGCAGG TAGCTGGGTG TCCCAGGCTG GGTGTGAGCC AGCCTGCCCT
78601 TCCCAGATGT GGGAAGCTGT GCGTCTGAGA TAGAGAAAAA AGAACTCAAG
78651 GTAGAGAGAA GCGCCTTTGC AGAGTTCAGG ATGGTGAAC TCTGTGTGAC
78701 AATTCTAAGA GCATTGTTTG CTAGCTTTGC TGCGCACCAG ATGTGTACTG

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78751 TACACACAGC ACTTTACCAT TCTCAGTGTC ATGAGTCCCT TGGGGGCAGC
78801 AGTGTGGCCC ACTGTACTAG GTCCTCACCA GGGCTGAGTT AATCTGTACT
78851 CTAGGAAAGTG CTCCGAAAGG GTTCCTGTTA CTAATACTCC TGAATAAGAA
78901 ATGACAAGGC ACAGTGCCCTG AAGTCTTATG TTCATTTTTA GACAACTCTG
78951 ACAACAACCT TGTATGGAAG GTATTAGTCC TCATTTTATA GATGAGGAAA
79001 TCAAGGTTCA GAGAAGCTGA ACAGCTTGCA AGGCTGAATG GTTACCGCTT
79051 TATCCAAGAA CTTTCCCTGT TGCAAGAGTA ATGTATGAGG TGCTCCCACT
79101 GTCTTCCTCT GCACTGAATC CAAGACATCT CTGAATCAGC CACAAAAGTG
79151 CCTCACTGGG TGTGGCCCCA GAAATCCTCT CTGAGACCCT CCCATGGTTG
79201 TTTGAAATAT TGTGAACTCA CCTTGCCCTT GGAAGATCA CTTGTGTGGC
79251 TGTGGAATAT TTATATGTGA AATACTTCTG AAGCAGGTGA AAGAAAAAGT
79301 AATTGTGGCA AGCAAATTAA ATATTGTCTT TCCACTTCAA ACCCGAGGCT
79351 CTTGCGCCAT AAATGTGTGA GGAGGTGGAG AGATGTGCTT GCCCTGCTGC
79401 TGGGGTTTTG AATCATTAGG GGCATTTTTG AGTAGTAATG AATGTGGTCT
79451 GCCAGTTGCC TTTCTCACAG AGTTTGTGGC TTTCTCCCA ACTGCTAATG
79501 GCTGGAATAG GCTCCCTTTT TTTTTTTTTT TTTTTTTTTT TGAGACGGAG
79551 TCTCGCTCTG TCCCCCAGGC TGGAGTGAGG TGGCGCGATC TGGGCTCACC
79601 GCAAGCTCAG CCTCCCTGGT TCATGCCATT CTCCTGCCTC AGCCTCCCGA
79651 GTAGCTGGGA CTACAGGCGC CCGCCACCAT CCTGGCTAAC ACGGTGAAAC
79701 CCCGTCTCTA CTAAAAATAG GCTCACTTTT AATACATTTT AGAAACCACT
79751 TTCCACATTC ATGCCCTCAT CCTGCCTCAA TCCCTGGCTA AATCTCCAAT
79801 TCATAATCCC TTTGCTGACT GTGCCGTTCA GGGAGTAAGA ACGTGGTGGA
79851 CGCAGCCACC ATTTGACCTT CAGATGAAGT CCTTTCTCGA GAGACAAACA
79901 GTCTGTTAGT AAAATGACCA TACATCCTGG GTTGCACCTG TCCTGTGGTC
79951 CCAGCATAGC TGTTAACAGA GCTACCTTTT TATTTGCAAG TTCCCTGCTT
80001 TGGACAATAG ATCAACTGGT CATCCAGCTA TTAGCGTCCA TGCATAAAGC
80051 ACGAATCTGT TGTATTCTTC AGCCAATCTG AGACAACCAA GAGATTACTG
80101 CTGCACCTTT GTTTGTCTTT CTTTTTGGTG GCACATAAGG AAACAGAGAA
80151 ACAGATGATC TCACCGAGTG CACAGATCAT AGGAGAAAAG CCACAGACAG
80201 TTAGTGGTCC CCTGTGGGTC ATCATTCAAT CCAGTGAGC ACTAACGCTC
80251 ATGATGGTAT CGCACGCTGT CTGGAGCAGT GATTTCATGTA GCTGGCGTTG
80301 CCTGATGGGA GGAACTGGT GGGGAAAACG TGGTGGGGGG TCCTGTGAGG
80351 GGTCCAGTTA CCTCCTCCTC CTCTCTTTCT AAGCGCATCA GCTACAGACC
80401 CGCCTCACTT TGTGAGAGGT TGCAGTTTCT CTCTTCTGCC TGTCAGGTAG
80451 TCCTAATGCA TGGTGTGGGG GAGGGAGGAC AAGGGAGAAA GAGGGGCACA
80501 GAATCTTTTA GATCTGCCC TCTTTCAAGT CAGCTCTCCA CCTCTTTTAA
80551 AAAGAAACAA ATCATTATTA TTTTGTGTGT TTTGTTGAGT TGCTTTTGTG
80601 TTTGTCTAAT TTTAGAAAGA AGTAAAATGT TTTCTCTCTA CACCTCTGGG
80651 AAGATAATAT ATCTAAATTT ATTAGTTTAG TTTGTTTATT TATTTATTGT
80701 TAACTTAAAA CATTCACTCC CGTGCCATTT ACTGGGTAGC TGAGTGGGTG
80751 CTGGAAATGC CAGCTTAGAG GCTAAAAAGG AAATTCAAGG AGGAATGGAA
80801 TTAATAATGA AAGTAATGCC CTCTTATCTA CAGTATCCCC TCGTATCTAA
80851 TTATCTGTCT ACCTCTATTG AATTATCTGC CTGTGTGAAT TTTTGTGATC
80901 TTGTAAGATC TCTCTGAAGT TGATAATGGT TGAAGTTGTA AGTGAACAAA
80951 TGATGCTCAC TGAGTCTGAA ATTATTAAAT AACATTGGTT GAACCTCTAC
81001 CCTGTAACAT CTTTGTAGCT AAAGTGTTCG GAGCTCAGTT GTGCCATTTT
81051 ATCATCTGTG TGCTCATACA TTCTAATGGG CTGCCCTCCA TTCCTTCTG
81101 CAGCTTGAAT GCAGGTAATT TTTTCTTTT TTTTGTGAGA CAGAGTCTCA
81151 CTCTGTGGCC CAGGCTGGAG TGCAGTAGCG CGATCTCGGC TCACTGCAAG
81201 CTCCACCTCC CAGGTTACAG CCATTCTCCT GCCTCAGCCT CCCGAGTAGC
81251 TGGGACTACA GCGCCCGCCA CCACGCCTGG CTAATATTTT TGTATTTTAA
81301 GTAGAGATGG GGTTCACCA TGTTAGGCAG GATGGCCTCA AACTCTGAC
81351 CTTGTGATCC ACCTGCCTTG GCCTCCCAAA GTGCTGGGAT TACAGGCATG
81401 AGCCACCGTG CCCGGCTGAG AAAAATCTTA AAAGCAAATG CATTTAATTT
81451 TAAAATGTTT TACTTGAGCT CAAACAATTA AGATCATTG AAAAATACTC
81501 GAAAATTAAAT AAAAATTAGA ACTGTAAACT CAATTAGAAT TATTATTATT
81551 GAGTTAAAAA TGATGTTGCC AATTCAAATG GTAACGTCAG TTATAACCCG
81601 AGTTTGCTGA TTCATTTGAA TTCTGGTTGT TTGCCAGAGT TTTTCAGAGT
81651 CATAAGATCC AGATAGAAAA TCAAACCTCA TTCTCAGCAT TGGGGCTTTC
81701 TAAAGCCTTG TCAGAAATTT GGTGACTCGT GGGAGAGCTT ATTTTCTCC
81751 TTTTCATTGA GTCTTGCTCT CAAGGAGTTA GTTCAGATCA TCAGTGGCCC
81801 TACTTTGCCC ATAACAAGCC TTATGTATAA TTTCCACAAA ACTGCTTCCC
81851 CAGGGCATTG GGGTGCATTG GCCATTTTAC TGAAGATTG GCAGGGAGAG

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81901 AGGAATTGAC GTCACAGATA GAACCCAGCT GAAATTGGAT ACTAGATGGA
81951 GTTGCTCTTC AAAGACTTGG GCATTGCCGC TACGGAGCCT GAATTTCCTA
82001 CCTGTACGTT GACACCCCTT TTTGTGCTT TATTCTTCT TGTCCTCCTT
82051 TTTCAGGGCT TTTCCCTTTT CTCTGATCCT TCCCTCTTAG GGTATAAAAA
82101 TCAACCTTTT CCTACTTTAA TTAATTTATT CTTTAATTTT ATTTTAACAC
82151 AGAGCGACTC ATCTCTAATC AGCTTCAACA GCCAAGTGAA GTTTGGTGTC
82201 TCCATTTGCA TGTTCAAGGA AGTAGTCTAA TTAGAAATGA TCTCTCGTGA
82251 GGTCTCTTCT GCCTAAATTC TGGGACAATG GCTATCCTCC TTCCTCATCT
82301 GTCTGGAGGT GAAGATGGGA GTAGGGGAGG CAACATGCAT TCTAGGTACC
82351 AAAGGTAGAG AAAAGGCAAA ACCATCCGCT TTGGGCCAGA CAGGGTTGAA
82401 TCCTGGCCTC TTCACTTCCT GGCTGGGTGA CCTAGGACAA GTTAATTAAG
82451 TTTCCTGAGC CTGTTTCCCC ATCTCTAAGG TGGGGGATAA TACTACTTTC
82501 TTGCAAGTTA TGGAAAGGAT AGAATGGAAT CACACACAAG TTGTAGAAAG
82551 GATAAAACAG AATGACGCTT CTAGTGCACC TGGCGAAAGG CAGGCACTTA
82601 ACAACTGTTA GTTCCCTTTT CTTTCAACT GATAAACACT TTCCTTGAGG
82651 GTTACATAGG TAAACATTAA ATATTTATGA ATTGCATAAT TCAAGAAAAA
82701 TGAAACTTGA AAAGGATTCT TCAGATTTT TGATGAAACA AATCATCGTC
82751 CCCATTGTCT TTTGTGCAAA TCTGTGTTTT TGTTTGCAGT GCTGGGTTTG
82801 CTTATGACAT TTGTGTGCAA TTCTCAGCAC CGTGAGACTT GAGTGAGCCT
82851 AACCTCTCTT CACAGCTTGA TAGGAGTTGT AAATATTAGG TACTGATGGT
82901 ATGATTGAG GCAACCTAAG TGACTGAAGC CTAGAGCCCT CCCTGCGGTA
82951 TTATTTCCAA GTGGGCTCAT CAGAGCTGAA TTGATAATGA AGATATAAAC
83001 ACTGGTGAAG GCTTTGTGGC TTGGTCTGAT GGTACTCATA CGGCACAGTG
83051 AAAATGGAGA TGCTACCGGT GGAAAGGACT CACCATCTGT CTGCCCTCTA
83101 GAGCAGAGCG GAACATACCT CTGATGATTA TGTGACCACT GTCAATTAGG
83151 CTGATTTATG CAAAGACAGT CTGTACACAT CCCATGCAGC CAGATTTTAA
83201 ATTCTAGGGT GCCAGGTTT GCTAGAAACA GTGGCCGGCT GCGGTCTTGC
83251 ATAATATTCC ATGTTCTCTT AGAGGCAGAA AAGAATAGAC TCACGACTTG
83301 ACAGAAGGTG CTTTTTCCC CTGTATCATC CAGTCAATTG TCTATGAGTC
83351 TGCCAAATCT AGCTCGCAGC ATCTTTTGT ACAACCCCTG AGCTGAAAAT
83401 GGTTTTTGCA TATTTAAAG ATTATTTAAA AAAAGAAAAA TATCCAACAG
83451 AGACCCATAT GTGGCCACC AGGGCTAAAA TATTTACTAT CTGACCCTTT
83501 ATGGAAAAAG TTGTTGATCC CTGGTTCAGA GTGTTTGAAA TAACCTCAGAT
83551 GAAAGAAGGC AAAATGTAAT GATGATTGAC TTTTCCAGTT GTAATCTGAT
83601 TTGTGACAAC CACTGTATGC CTGTTTAAAC AAAGCTTAAT GGGCATTACT
83651 TAGGATAAAT GTAATTACGT TTCAATATTT GTGTCTTGCT CTCCCTACAT
83701 AGGGTTATT CAGGTTTGCC CAAGGAACAG AGAGTCTGTT TGTGTTCTA
83751 GAAGTAGCTC CTGTGTCTGT CACCTCCTCT CCAAGGCTTC CACCTGTCGC
83801 TTTTTTATCC CAGTTCACCC GTGTGAACAG CATGTGTTTC GGCTGCCATG
83851 ACAGCACGTC CTACCTTTT CCCTGGCTTG AAAGAAGATG GCAGGGGCCA
83901 GCTCAGGAAG AACTGCTACG GAGTTTTTTC ACCTTCTCCT GCTCGTGATG
83951 AGGCTAGGGA GGGATTTTTC GCGTATCTTT AATTGTTGCC GAAGTATGAA
84001 CTCGGGGGAG GGGGCAACTG TGAAGCAGTG ATGCATAGAC TAAGTCTCCT
84051 GGAAGAAGCA GGGCTTGAAT TAGACCCAGA AGGATGGGCA CCGTTTGTGG
84101 GAGGGCACAG GTACATAAGT ACAGGGAACA TGTCATGGAG TGTCTGCCCC
84151 AGAGTGGGGA ATTTATAGCA GTGTGAGATG AAAATGGGTC ATCATTGTGG
84201 CCAGTTTGTT GGAAATTTTA AGGTGTATGG AATTCCAATT CAGTTATCAT
84251 CAAGGAGTCA TTGTAGCTTA TTTTAAAAA GAGCGATGTG TGTGTGTGTG
84301 GTGTGGGGGT GGGGAGAGT GGAATGACAA TCATGAAATT GGCTACTGTT
84351 TGGTAAACCC TAAGTGGGAG CCAGACATTT GGCTAAGGGT GTTACTTGA
84401 CCATCTCATT TAATCCTCAC AACAACCCCTG TGGGGAAGGT ATTATCTCTA
84451 GTTTGCAAAAT GAGGAACTA GGCTCAGAGA GGTTCAAACA ACTTGCCCAA
84501 GGTTCTGAAG TTAATAACGG CCACAGCCAG GATGGCTCTT AACTCCTGCC
84551 CTGTGGAAAC AAGCTCAACG TAAAACATTC TTACAAGACA GAAAAGAGTG
84601 AAAAAGCAAC CAAAATCCTG CCTTGCGGAA ATGCCCCTT TGGGTGAACA
84651 TTCTTCTAGA CTTTCTTGT GTGTGTATAT GCACAGAAAT TTGTAACATT
84701 TTGCATAATC TGGGCCACCC CATGCCTGCA AGCTTTCTAT AAATGTCACC
84751 ATATTCTATA TCCTAGCGTT TCCCCCTAT TTAACACTAA TTTTCTGATT
84801 TTCACAACGT GGTGCATAGT ATTTTGCTTT GGGATGCTAC CATCATCCAC
84851 TTAACCAGTT CTCTCTAGAT CACTGCAGGT TCTTGAGTAG GGGAATAATG
84901 TATTGGAACC TTTTTTTTTT TGAAGAAAAA AAAAATAAAC AACTTTTAAA
84951 CTGAGTCTTA TGCTTTTTTCC CTTTCTTTGC AGCATGCTCT TGATGCTGAC
85001 AATGCGGGAG TCAGTCCAAT AGGAACTCT TCCAACAACA GCAGCCACTG

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85051 GGACCTCGGC AGTGCCTTTT TCTTTGCTGG AACTGTCATT ACGACCATAG
85101 GTACCCGTTT GTTTGCTAAT ATCTCTTCCT CTGCAGGTCA TCTTGAGTAA
85151 GGGCGCTTAG TCAGTGTTTT GTCCTCATAG CATACACTAT AGTTTGAGGT
85201 TCAGAGGAGG CTTACGAAAC ACTGTCGTTT AAATTAATGC AGTCATTGTG
85251 GTGGCTTTCA ACAAAGCCA AAGCATAATG AAGTATCTCT TTTTCCAGAA
85301 TGAAAGGCTA GCAAACCTAA TGAAAAGGTT AGAATGAAA ATATGAGTTG
85351 GTCGGTTGAA CTCGGGTAC TCATTTGAGC TCAACTCCA TTTTAAAAAT
85401 TGTACTTCTT ATTAAAGTTA TATAGTAAGG AACCAAATA TTCTACAAAA
85451 TTTTTTATAA AAAACAGTAA CATTCTGACC GTCTCACCTT TTCTTACCTT
85501 CCCAGAGACT GTTGCTTTCA TCTGTTTGA TTGTTGATTT TAACACTCAT
85551 CCCCATGTCT TTAAATATCA TGCTTGTGCT ACTTCTGGAA TTTTCAGTTT
85601 TGGGGATTTT TTTTGACTTT CCATTGTGGA AGATGAGGAG TTAGTTCCTT
85651 CTTCTGCCT GCCTCATCAC AGAAGGGCTC TTTTCTGTC CTCCTGTCTT
85701 CCCAATATTT AATTAGATAG AAGTGAAACA TCTGCATGAT TTTGACTAGA
85751 TAAATGCTTT CTGCAGCTGA TCATAGAGTG AACAGTGATG ACCTCTTCC
85801 TGTATCAGTC TTTGTCTTAT TTTTGTATG TGTGCTTTT TTTTCTGACA
85851 CTTGGTGAGT TTTGTATTTT TGTCTTAGGG GTTAACCTTA TTTATTATT
85901 TATTTTATTT TATTTTATTT TATTTTATTT TATTTTATTT TTTGAGATGG
85951 AGTTTCACTC TTATCACCCA GGCTGGAGTG CAGTGGTGCA ATCTCGGCTC
86001 ACTGCAACCT CCGCCTCACG GGTTCAAGTG ATTCTCTGTC CTCATTCTCC
86051 TGAGTAGCTG GGATTACAGG CGCCCACCAC CATGCCTAGC TAATTTTGT
86101 ATTTTATAGTA GAGATGGGGT TTCACCACAT TGGCCAGGCT GGTCTCAAAC
86151 TCCTGACCTC AGGTGATCTG CCCGCCTCAG CCTCCCAAAG TGTTGGGATT
86201 ACCGGCGTGA GCCACCGCAC CTGGCCTAGG GGTTAACTTT ATAAGTATAA
86251 TGGCATATAA TAATTTTAGT GTTCTATTCG TTAACCAGCA TGTATTCGAT
86301 CCCTATAACG GGTGATGATA TCTCTTTTCT CTCTTTTCC AACACAAAGT
86351 TTTGGTGGAC ATCATCTTTT AAATGATTAA ATTTGCTTAT GTTTCTCTTA
86401 TATGATTTGC CAGCTTTAAA TGATAACTCT TGGCACTCAG CTATTACATA
86451 TAAGGCAGTC AGTGAACCTA GCATCTCAAT TTCCTTTCCC TCTTCCACTA
86501 TCCACTCTTA TTGATGGTGT CATTCTATAT AAGTTGTATC TCACCTTATT
86551 GTGCTTTGCT TTATTGTGCT TTGAAGATGT TGAGTTTTT TTTTTTAAAC
86601 TAATTTAAGG TGTATGGCAA TCCCGCATTG AACAAGTCTA TTGGTGCCAT
86651 TTTTCCAACG TCGTGTGCTC CACTCTGTGT CTCTGCCACA TTTTGGTAAT
86701 TTTTACAATA GTTTCAACCT TTTTCATTTT TGATTATATC TGTTAAGGAG
86751 ATCTGTGGTC AGTGATCTTT GATGTCATGA TTGTCATTGT TTTGGGGTGC
86801 CACAAACCAT GCCCTTTGAA GATGGTGAAC CTAATCAATA AATGCCGTGT
86851 GTTCTGACTG TTCACCAGC TGGCCATTCA GGCATCCCAG ATCCCTGAGG
86901 CACAATGGTA TTGAAATTG GCCAATTAAT AACCCTGCAG TGGCTTCTCA
86951 GTGTTCAAGT GAAAGGAAGA GTCAGTTGCA TGTCTCTCAT TTTAAATGTA
87001 AATCTAGAAA TAATTAAGAT TGGTGAGGAA GGCATTTTGA ACTCTGAAAC
87051 AGGCCAACAG CTAAGTCTCT TCTGCCAAAC AGTTAGCAAA GTTGTGAGTG
87101 CAAAGGAAAT TTTGTGTTTT ATTTTTTTTG AGACAGGATC TCTCTGTGTC
87151 ACCCAAGCAG GAGTGCAGTG GTGTGATCAT GGTTCACTGC AGCCTTGATT
87201 CCTGGGCTCA AGGGATCCTC CCACCTCAGC CCCCTAAGTA GCTCAGACTA
87251 CTAGTGTGCA TCACCATTCC TGGCTAATTT TTTAAACATT TTTTCTAGA
87301 GATGGGGTTT CACTATGTTA CCCAGGCTGG TCTTGAACCT CTGGGCCCAA
87351 GTGATCCACC CACCTTGCC TCCCAAAGTG CTGGAATTAC AGGCATGAGC
87401 CACTGTTCTT GGCCAGGAAA AATTCTTGAA AGAAATTTAA AGTGATACTC
87451 CAGTGAGTGA GCACATGAAT GATAAGAAAG TGAACCAGCC TTATTGCTGA
87501 TATGGAGAAA ATTGTAGTGG TCTGGATAGA AGATCAAACC AGCCACAACA
87551 TTCCCTTAAG CCAAATCTA ATTCAGAGCA AGCGGGCTCT TTTCAGTTCT
87601 ATAAAGGCTA AGAGAGGTAA GGAGGCTTCA GAAGAAAAGT TTGAAGCTAG
87651 CAGAGGTTGG TTTATGACAT TTAAGGTAAG AAGACCTTTT GATAACATAA
87701 AAGTGCAGGT TAAAGTGGA AGTGCTAGTG GAGAAGCTAC AGCAAATTAT
87751 CCAGAAGGTC TAGCTAAGAA AGTGGCTACA CTAAACAACA GATTTTCATT
87801 ATAGACAAA CAGCCTTATA TTACAAGGTG CCGTCTAGGA CTTCCATAGT
87851 TACAGAAAGAG AAGTCAATGC CTGGCTTCAA AGCTTCAAAT GATAGGCTGA
87901 CTCTTTTGTG AGGGGCTATG CAGCTGGTGA CTTTATGTTG AAGCCAGTGC
87951 TCGTTTACCA TCCAGAAAAT CCTAAGGCCC TTAAGGATTC TGCTTGCCTT
88001 TCTATTAAAT GGGAACCTCA AAAGCCTGGA TGACAGCACA TCTGTTTACA
88051 GCATGGTTTA CTGAAGAGTT TAACCTCACT GTTGAGATCT ACTACTCAGA
88101 AAAAAGATTC CTTTCAAAAT AGTTCTGTTC ACTGACAAATG CACCTAGTCA
88151 CCCGAGAGCT CTGATGGAAA GGTGCAAGGA GATAAATGTT GTTTTCATGC

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88201 TTGCTAATAC TACATCCATT CTTTCAGCCCA TGGATGGAGT AATTTTGACT
88251 TTGAACCTCTT ATTATTTAAG AAATACATTT CATAAGGCTG TAGCTGCCAT
88301 ACATAATGAT TCCTCTGATG AGTCTGAGCA AAGTGATTG AACATCTTCT
88351 GGAAAGGAGT CATCATTTGTA GATGCCATTA AGAACATTTG TGATGAATTG
88401 GAAGAGGTCA AAATACCAAC ATTAACAAGA GTTTGGAAGA AGTTGATTCC
88451 AAGGCTCATG GATGACTTTG AGAGGTTCAA GACTTCACTA GAGGATGCCA
88501 CTGCTGATGT GTTGGAAATTA GAAGTAGAGT GTGAAGATGT GACTGAAATG
88551 CTGCATCTCA TGATAAAACT TGAATGAATT AGGAGCTTCT TCTTATGGAT
88601 GAACAAAGAA AGTGATTCTT TGAGATGGAA TCTGCTCCTG CCTGGTAAAG
88651 ATGCTGTGAA CATTGTTGAA ATGACAACAA AGAATTGAGA ATATTATATC
88701 AACTTAGTTG ATAAAGCAGT GGCAGGTTT GAGAAGATTG ATTCCAATTT
88751 GAAAAAGTT CTACTGTAGG TAAAATGCTA TCTAACAGCA TTGCATGTTA
88801 CAGAGAAATT GTGAAAGGAA GAGTCAATGG ATGTGGCCAA CTTCTTTGTT
88851 GTCTTATTTT AAGAAATGT CACAGCCACC CCAGCCTTCA ACAGTCAACG
88901 CCCTGATCAG TCAGTAGTCA TCAACATCAA AGGAAGACCC TCCGCCAGCG
88951 AAAGCATTAT GACTTGTGTA AAATCAGAT TATTATTAGA ATTTTGGTA
89001 ATAAAGTATT TTCAAGTTAA GGAGTATATA TACATTTT AGACCTAATG
89051 CTATTGTACA CTCAATAGAC TGTAGTAGAG TGTAACATA ACTTTTATAT
89101 GCACTGGGAA AAAAAAAGA AAATGTGTGA CTCATTTTAT TGTGGTGGTC
89151 TGAAGTCTAA CTCACAATGT CTCTGACGTA TGCCTGTATA ACCTCAGGGT
89201 ATGTAATTTA GATTTTAAAT TGTTACCTG ATATTTGCAT TTGTTTGTAGT
89251 CGTAGCTCTA TAGTTAGATA TCATTAATGT TCATCTCTAG TCCTTTTGCT
89301 GTGGTTTATC TCATGATCAC TTAATTTGGCT GAAAGTCATC TTCAAGTAGT
89351 TGCCTTAAGA ATGGCTCAGG GGAGCAATAT TCTGTGAGAT CTTGCATTGT
89401 TCACAGTTGT AGCTTAACAT TTGAAGGATA GTTGAAACAA AATGAAATCC
89451 ATTTTATTGA CTCACATTTT CTTTTTCTTT TTTTTTTTGA GACTGGGTCT
89501 TGCTCTGTTG TCCAGGCTGG AGTACAGTGG TATGAACATA GCTCACTGCA
89551 GTCTCCAACT CCTGGGCCCA AGTGATCTTT TGGCTTCAGC CTCCTGAGTA
89601 GCTGGGACTA CAGGCGCATA CCACCAGGGC TAGCTAATTT TTAATAATAT
89651 TTGTAGAAGC CAGGCTTTGC TGTGTTGCC AGACTGGTCT CAGACTCCTG
89701 GCCTCAAAGG ATCCTCTTAC CTTGGCCTCC CAGAGTGCTA GGATTACATG
89751 TGTGAGCCAC CACGCCTGGC TTTAATTTT CTTTTTAACT GGTCTCACAG
89801 GTGTTGCTCT TCTGTTTCCC AGTTTTTATG CAGCTGTTGG GGGAAACCTG
89851 ATGCCAGCCT TTTTTTCCCC ACTTTTATAG GTGACTTTAT CTTTTTGTTC
89901 AGTGACTTAA AATATTATTT CTCTTTTATC TGATAACATT ACTAGGTTTT
89951 GACTCTTTTA TTGCATTAAA GTTTTCTTGA TTGACATCTT TAAACATTTT
90001 CTTTGCTGTG TGGTTTGGT TTTGTTCTTT GGGAGATTAC AGCTATACAT
90051 ATATTGTAAC TTCTTTGCTC ATCTTCTATG TCTCTCATTT CTCTTCTACT
90101 TTTTAACTCT TAAAATCTAG TTTTCATTT GTTAATTTTA TTCTCCCTAT
90151 TCCTTTAGTT TGTATGTTT CCACAATGCC TGTGCTGCCA TGAGCTCCTT
90201 CCAATTTTAT TTTTGTTTT TGTGATCAAT AGGGAATTTT TTCCTTTTCC
90251 TGTTTCTTCT CTGAATTTCA TAGCTCACAT TTCATCTTCA CTTGTTGTTC
90301 CATTTTTCCTA CTGATTTCTT GAATTTCTAC TTTTGGCTT CTCTGTGAAG
90351 ATTCTTAGAG ATGATTATTT CATACTTGGT CACAATTTT GTCTGATTTT
90401 GGAAACATTT TTCTGGTGAG CCTCTTTCCA TCCATTGGTA AGTTTTGCTA
90451 CTCTTTTCAC ATTTTTTTTC TTATGGAAGT TTTATATTTA TGCTGGGTCA
90501 ACTTCTTTT AAAATACCTG GCCCCAGGCA AACTGGATAT TCCTGGACCA
90551 GCTTCTGCCC AAATGATTTT ATGGAGTTGG GGAGAGGAGA GCAGGGTGAG
90601 TCAGGGTACC ACCTCCAGA CAGCACATCC TAACTCTCTT CATTTCTGTG
90651 ACAGAGTGTT TCTGCAAATA GGGTCCTTCT GTATTATTTT TGTCTACCT
90701 CCCTGTTTTC TGAACCAGAT CAAGTTCAGG GTGGCTTCTG CTGCTCTCCC
90751 TCTTTATCCT ATGTTTCATG CTTGGTAAAA ACAGGGACAT CTCTTTTGAA
90801 GTTCAGAGTG AGACCCTCCC CTTTATACTT GGATATTTTC GGATACCTTC
90851 TGAAATTTAC CACTTTAGGG CCCTGTCTATC ATTTTCTGAG CTTCTTCTTT
90901 TTATTTTTTG TTCATATGGC TTCTGTCCAA TCTCCGCTTC TTTTGGTAGT
90951 TCTTACACAT ATGCTGGAAT CTCTGGATTA TATCCTTCTT CCAGCTCTGC
91001 TGAAAATGAG TTTGAGGATT TTCTGCCAC ATACAATTGT GAAGTAGCAC
91051 TGCAACAAAA ATCTTCATTC AGAAGCAGGA GAGACACCCA GCAGTCACTG
91101 GTCCACAGCA ATGAGGGACA GGCATTGAGA GGCTCCCCG CCCTCCTGGT
91151 GGGGAAATTT CTTTCATTC AACTTGTTTA TACTCTCTAG GAGGAACTCC
91201 CTGCCTTATT GCTCTCTGAA GCCCAGCTAT GCCTTTTGAG AGGTTCTTTC
91251 CTCTGAGGCA CAGTTTTGAC AATCAACTTC CTATAGGCGC AAATTTTACA
91301 GGCTAACGAT TGGTTTAGCG GCACAGGTTT TTGCTTTTGT TTTAAGATCT

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91351 AGCCTTCAGG ACCTATGTTG TTTCTAGGTG AAATCCAGAA AGTCATATGC
91401 AACAAGAACA TTTTGGATGA AGGAAAATTG CCATTGTTAT TTAGAAACAC
91451 TCTTAATCTA ATTATATGAC ATGCTAGGTT TACACTTGCA AATCTGCAAA
91501 TATATTGGTG TTAGCTATTA AAAGTATTCA AGATGCCCAT GACACCAGTG
91551 GGTCTGGGGC TTAGAAGCCT TTTCTGGCAC TCTAGGCCAG GTTAGGTCAG
91601 CTTAATCCAC AGACTCACAG CGTCCAACAA AGGAAGCTGG GTGGCTGAC
91651 ACCATTAGT ATACGGGCAA AAAGTGTTAG CAACCTGAAC AACACCAGAG
91701 GCGGTTGCTG TAGTGGATCC AAGAAGACCA ATGTCAGGTT TCATTGTGTT
91751 CAGCAGATTG TTAACCTGGG AAAAAGTGTC ACGCATTGTA GGAGGATCTA
91801 TTGTACACCA ATTAAAATTG AGAAAGTCTG GGCCACTTCA AGAAGTACAT
91851 TTTGGAAAAT GCTCTCTGAT ACCCGGTATT GGATTCATGA GACATTAGTG
91901 TGTATATTGA AGGAAACTCC TAATTTTCTT GTTTCATGAC ATGGCTAAAT
91951 GAATGATCTG TCTGCTGCAT TGAAAAACAC TATGGCTACA TTGGAAGGTG
92001 CATTAAATGGT ATTTATGTG TTAGCTTGTT AGGAATCCAG GAACTTGGTT
92051 TATTGAACAA CTATGTTTAT TGATCCACAT AATATTATGT GACTGAGGAA
92101 TGGTGGCTCC ATCTGCCTAA TGAAGAACGT TTGATATGCG ATGGTTTTTG
92151 CCCTTTTTTG TGTGTGTGCT TACACCGGAA TCTTTGAGTT TGAGCAAATG
92201 GCTCTTAGCC CTTGGATTCT GTTGCCTGGA TTCCATTAC TTA CTCACCC
92251 ATGTCCTCAT TGT CATATCC CCAGTGGTTC CTTTCCCCAT GCTTTGTCCC
92301 CAGGCCTCAG GTGAACAATC ACCTTGTCTA GACTAAGAAA TCCAGTGCTT
92351 GGCCACAATT ATTAGTTCAG AGATGGACAT ATGATCTGGA TTAGGGGCTT
92401 TTGCCGGAGC TTTGGAGGAA ATGACCTCTC TTTCTTACTA AAGGTAAGTC
92451 TGAAAAGAGA CAGGCCTAAG GCACTGCCAG TCATTTTTTT CCCCTTGGGT
92501 TGTTCTGCCT AGAATTCATC AAACACTAAA GAAGCAGAGT GAAGAAAAGG
92551 AGTGGTGAAT GGGGTCTTGT TTACATCATT TGAGCTCTGG ATGGTGCTAC
92601 CCAGGAAGTG TTAAGAAATA AATGTTAAAC CCCCTTCTAT TTA CTGGGGT
92651 CAATATATTT TCTTTCTGTTG TTTAAGCGAG TGTGCGTTGA GCTTTCTATT
92701 ACCTGCAAGT GAGAACATCC CAATACATGC TTTGGGTCAG AGCTCATGCA
92751 GGGCCAGTGA ATATCCTCTG ACCTCCACAG CTAGTGACTG AGCCTGCTGG
92801 CTGCTGCAGC TGCCATCTGT CATCATCTTT GAGCCACTGA CTCTTGATTT
92851 AAAGTCTTAG GCAGAGCCAT CCTATTGTGT CATGTGCACA CATCCTGGCT
92901 GCCTAGGAGC TGTTTCTCT GTGGTGGGAG GCAGGACACT GTGTCATACC
92951 AATTATGCAC AGGAAGGGGG GCTTTCCCAA AAATCAGAAG GAAGGTGGAT
93001 GCTGAACAGG AAACACTGTC AAAACAAATG TGCATCAAAA CCAAAAGTAA
93051 AATGCAAAGT CCACTTCAGT ATCATTGTAC AGTGTTAACA CTAGAGATAG
93101 GGTCTTGTGT CTATTTAATT TAGAAAACAC AATTTTCTCT CTCACTCTTT
93151 CTTTCTTTTA ATTGAAAAAT AATGTATTGT AAGTTGAGCA CCATTAGCT
93201 GGCTAAATTT TAACCTCAGA GTGGAGGATC TTTATAGAGT CATACAGTTA
93251 GAGAATTCCA AAGAAGCCCT TAATACAATG TAAGTAAGAA TAATGAGGTG
93301 CAGAAAATAAT TGTTTTTCCA GTTACTTAGT GGTAATTCAT TTTGTTGCAT
93351 GTGGTCGCAA GGTTTATAAG AAAACTCAGA GCCCAGCAAT TCTTCCAGTT
93401 CTTCTTGAGC AATTTCCAC TAGTTAGGAG TCAGGAAAGA GGAACCGTGA
93451 GAGCTGAGGA GCTGTGTATT TCATTAATTG TGAAATACAC AAATATTGGC
93501 CTGTTTCTTT GCGATCATAA AATTTGCAAC GTAATATTGC AGACATTTTT
93551 GCATATTACT AAAGTTCTTT GAAAAGTGTA TTCTTTGATG GTTTCTATTG
93601 GATCCACTAT TCACACTATA ATCACATATT CCTGGGAAT TAAGCTGTTT
93651 CTATTTTAGT AATAGTGTA CACCATGGTG TTAACGTTGT GAAGTGTTGT
93701 CTTCATCTCT GGTGTGTGCC TTGGAAGGT TACCAAGGGT TTGCTCTGTC
93751 AAAGGAAATG AAAGGCTTGC CAAATTTCTT TCCAGAAAGG CTCTCATGAG
93801 CAGCTTAAGG TTATGTACTT TTCAGACATA AAAAATGTGT TTATTAGGTA
93851 GAATGTGTAT AGACACACTT TGTGAATAAT AGAATCTTT CTGAAAAGCA
93901 GCGCTACTCC TTAGTATCAG AGATCCCTTT TATCTGAGGA TATCAAAGCA
93951 CTTCTTTTTG AAGAAGGTTT TTCTTGTGCT GAGATATATG GAAAGATTTA
94001 CAAGTGTATA GCAAACGGAA TACCTTCAGG CACTTCTCCA GACCAGTAGC
94051 CACGCCAGAA GGAAGAGCAG ACTCTGCTCT GTCAATGACA GGGCTGCACT
94101 GCACCCTAGT CCCTTTCTCA GTAACATAAT CAACGTGAGA AAGTCCCACC
94151 TGCTTTTGAT TATTGGCTCA GCTGGTGGGT CCCCCGTAAC TAGCTTTTCT
94201 AAGCTGGATG AATGATGCTC ACTTCTATGT GCAGATGCTT TTTACAAGC
94251 TGTCATTTGT AGAAGGACAG CGAGCGATCA GGTTCTTACC AATATCTGTG
94301 AAATGCGATT AGATTTTAGT CTGTGAGGCA TTTTCAGATT GAGCCACCTG
94351 ACTCTGCCCA CATCAGAGAG AGAGCCTCTG GTCAGGACCA GGTGGTAGCC
94401 AGTCACTGTG TCACTAGCCT GGCAGCCTCA TTTAAGGGTT GTCCCTATCA
94451 AACTATCGAG GCACCTGTTG GTACTTACCC AGCACTGGAT TGGATGTTTA

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94501 TTTTTTATTT TTATTTTAT TTTTATTCAG AGAAGGGGTA TTGCTTTGTT
 94551 GCCTGGGCTG GAGTGCAGTG GTGTGATCAT AGCTTACTGT AACCTCAAAC
 94601 TCCTAGCTCA AATGGTCTCT GCGCCTCAG CAACCAAGTA GCTGGAACCTA
 94651 TAGTTTGTC AATGGTCTCT GCGCCTCAG CAACCAAGTA GCTGGAACCTA
 94701 AGACAAGGGC TCACAATATT GTTCAGGCTG GTCTCAAATT CCTGGCCTCA
 94751 AGTGATCCTC CCACCTTGGC CTCCCAAAGT GCTGAGATTA TGAGTGTGAG
 94801 CCCCACCTGA TTTAGATGGG ATGTTTAACC TGTGCCTTTG AAAAGAGCAA
 94851 TCACCGTGGC TAACATTTAC TGAGTTCCTA CTAGTTAACG TGCAATTGTGC
 94901 TCCACATACA TTATCTCATT TAATCCTGCA TAACCACATG AGGTGGGTAC
 94951 TGTTATTAGC CTCATTTTAT CTATGAGAAG ACTGAGGCCC AGAGAAGTTA
 95001 AATAACTTGC CCGGTATTTC ATAGTTAGTA AGCAGTGGAG TCCAGCTAGA
 95051 TTCACCAGGA CCAGCTACAT AATTTGTGGC ACCCAGTACA AATTGAAGTG
 95101 GGGTCCCTTA GAGCATTAAA CCAAGCACAG GACCCATCTA AGCGTGGGCC
 95151 CTGTGGGACT GCACAGGGTG CACATCCATA AAGCAGCCCT GCCTGCGCAG
 95201 ACAGACTGGT GACCATAATA AGAAAGCACA CTCTCAACTA AACAAGTAGG
 95251 GCTGCACAAC ACACAGTTGG GCCAAGATTT GACTTTGGCA CGTAAACAGC
 95301 AAATGGAAGC CTTTGTGTGC ACTCCTCAGG CACAAGTCCT CTTTAAATGC
 95351 CAGCTTTCTC TTCCTGAAAA ACGGGGAAC CTTTTCTAGC CAGAGGTGAA
 95401 CAGATCTGAG CTCATCCTGG TGCTGTGCGT TCATTACAGC CTCCCCTTGG
 95451 CTGTTTGCCC TTGTGGAGTT GGTGTCTTTC TGCTGAAAGT CACCACCTGA
 95501 TGCTGTGGGT GCTATGGGAG AACAGTGAAG TTTCTGGAGG GAAGATAGGA
 95551 ATCAACCGCC TGTTTTCTCC TGGGACTGAG TTTCTCTGGA GACATATTGC
 95601 TCAGAAACAA TTCCTTCCCA CAGTAAAGCA CAAGGCAAAAC GGGGTGCTTA
 95651 GTTTGCATCA TATTTACAG GTATTTAATC TTCACATGTA ACTCTTGCTT
 95701 TGCATGTAAC TCATTTAATC TTTAATAGCT ATGGGTAGGC ACTTTAATAG
 95751 CTTGTCTTT TGATGAAGAA AGTGAGGGAG AGAGATTAAG AATGTGCCTA
 95801 TGACCTGAGA GTTGGTAAAT AGAAGAATCA GAACAGAAAT CTGTGTAGTC
 95851 TCTAGTCTA GAGCCTACAG ACAACTGTCA CACCTTACTT CAAAGTCTA
 95901 CCAAGCATT CTAGAAGGAT GAGCAGGGCA GTCAGAGAGG CGGGGTGTAA
 95951 CTAGATCCCC AAATCCAGAA ATGTGGTCTT CCCATTGCCT CAGAGCAAAG
 96001 CTCCAAAGTG TAAGTGTGG AATTTTCCCA GAGTGACAGT GTTGAGGGTC
 96051 AAACAGTCTC TCCTTATAGT TCACCAAAGG CATGGAGCAC AAATACACTC
 96101 ACACACACGC CCATGCATGA GATACAGCAT CACTCAAGAA TGATGACTTT
 96151 CTGTCCACTG GGCAGTGTGT CACCAAAGAA AGATGGCTGT GAATATATTT
 96201 AAAGGCTTGT TTGAGTATTG CATCACTCAT GCTCTTACCC AAGAACTTAG
 96251 CTTTAATATT ATTTTGTGT TCTAGTCAAC AAAACACTGA ACAAATAAGG
 96301 AACCAATTGT GATAATAATA ATAATAATAC TTTGCATTGG TACAGTACTT
 96351 TACAGTCCAT TGATTTTTC CCCCCTGCAT TTTCTTGGAG TACCTCTGAC
 96401 ACTAGGATTT GCAGATGTTA AGTGGGTCTA AGGAGAACTA GGTAGTGTGA
 96451 GGTGGAATTT GATCCAGATC TTTTCATCTC TCACCTCTCC CTGATGCTCC
 96501 ATGGTAAGCC ACAGTGCCCT ACCCAGGAGG TGGGTGGGGG TGGTCACTC
 96551 TGAAAGCTGG AGGAAGGGGG TGTAGCACTT GTCAGGATTA ATGAGATGCC
 96601 TGTTCACTCA GTTCCAAGCC TCCACTTGTG TGCCATATGC TGCAATATAT
 96651 TTCTTTCTGA GACACTTGA CAACCTATAT TCCCCAAAGT TAGGCTATTG
 96701 TGAGACAGTC AAGCTGGGGT CTTCACTGTT TTCACAAGTT ACTTGAATGT
 96751 TTCCAAGAGT CACCATAAAC CTGCATAAAG TGAAACTGTA GAGGCTCATT
 96801 TATTTCCCTT TCAATAGGGC TAGCTTAATG TCAGCTCGAC CATTCTAGAG
 96851 GGGTATTCTT GGAAAAATGA TTTTGTCCAA GTTCCTGAAA GTACCTGAAA
 96901 AAAGTTCTGA GAGCTTTTTT GCATATTTAA ATCAAAATCC TGGTGAGTAA
 96951 AGGAAATACA AGATGAGGAA GCCTAGCCTG AACACTCATT TTAGAAATGG
 97001 AAGCTGTAAT TTAGATTATT ATAAGAGGTT TGAATGATTC AGAACAGAAG
 97051 ATTGCAAAAG AAAGTATCCA GGTGACTCAT TCCCGAAGGC AGAAGGCAAC
 97101 CGTGAGTTCT GCAGGCCTGT GGGTGGCTGA ATGATGGACT AACCATCAAC
 97151 GTTTTTTTAT CATGTTGCAT TCCCAACCTG TCAATAACCA TGGACCCAAT
 97201 AACTCACTCA TTGAATAGAT TCAGAAACAG GCCCCACATG ATTTACCCAG
 97251 ATTTGGGAGA ATGGTTAGAT TACTGTCTAG ATACTTTTAA ACATAAGATT
 97301 GTAATATCAA TTGGCACAAA AATGAATATT AATTAATTTA GACTTTTCATC
 97351 TCCATATAAA GTGTGCTAAT GCTATAGGAC TTTTCTTCC AGCAATACTT
 97401 TCTTTAGCCT CATCCATATA GGGTAAGCCC AGTACTCATT GTACATAAAT
 97451 TACTTATGTA ATGGCAGTAC TCTTAAGATT GCAGATGCGG GTATTTTCAA
 97501 AGCACTATTT GAAATACATA TTAGTAGACC TGACTATAAA AAGATTCTCT
 97551 TGTATTCAAA CATCCATCAA TAACTTTTAA GCATCTTATT ACCCTCAATG
 97601 CAAGAGGTAG TTGGGTGGAG AGGTAGGACT CAGAGATGAT GTGGAGTTCC

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97651 CAGTAAAGAG AAAAAAAGAA CCAGATGGGG CGAAACTTCA CTGGCGGTGG
 97701 GGAGAGACAG CACAAAGCCT TCCCTTCCCT ATTCTTTCCT GTTTTGTAGAC
 97751 TTCCAGGGT AAGGCTGTAC AATTCATGAG TCCTTCTAA CCTTGTAATA
 97801 GACCACATT CCTCTTAAAT ATGGGGTACC CATTACCCTT CAAGACAGCC
 97851 ACAGTCGGTC CAGGTGGAGC CCATGGGTAA GACTGTGAAA AAGAAGCTCT
 97901 TGTCAAATCT AATAAGTGCA GTGGTGATTC CTTCCCACGC ATTCAAGTCT
 97951 CGCTAAACTA GACATGCCCA TGATGCTTGG TGTTCAGAA AAAGGTGGTA
 98001 TCACTTTTTC TCAGAAATGA AAATGAAAGT TCTGAGTGAC CATGAATTTT
 98051 CTAAATGTG TTAATATCCA AGAAACCTTA AAACCGTTTA TAAGGGGAGA
 98101 AGGAAGAGAA GCAATTGGAAC AATGTTGCGA ATTGTAGAGG GCCTTTGAAA
 98151 TGAAGTTCTA CTCCCTAAAG CTCATAAGGT GGGGGAATGT ACAAACCTTTT
 98201 AAAAAAGTCT GTGAGTTCTT TGGTCAGTAT GCTAATTTCT CTGCCACTCT
 98251 CCCTCTTTT CATATTCTC ACCAGGTAT GGAATATTG CTCCGAGCAC
 98301 TGAAGGAGGC AAAATCTTTT GTATTTTATA TGCCATCTTT GGAATCCAC
 98351 TCTTTGGTTT CTTATTGGCT GGAATTGGAG ACCAATTGG AACCATCTTT
 98401 GGGAAAAGCA TTGCAAGAGT GGAGAAGGTG TTTCGAGTGA GTACTGTGTC
 98451 ATATTTAAAT TCTAACCCT GCGATCCAAT TGGCTTTAG CTGACAGGAT
 98501 CCAGGAGGCA GTATCAGGGG CATTGTCTGC TTTTAATGGA ATAATTTTAA
 98551 TGTTATGATT GTATTTTCT GTTTTGGCCA ATGGAAGTCA AACATCTTGC
 98601 ACCTAACTC CTTCTTTGA GTAGCTTCCT ATTTTAGAGT GATATTTCTG
 98651 CAATCACAAAC ACAAGAGGGT TAAGTATGGA TTTGCCAACA CAGATTTTTC
 98701 GAAGAGGTGA GACAAGTTCA GTTCTCCTT CAAGATGGAA GATGGGGTTC
 98751 CTCATTGTGT TTGTAATGAT GTAGAAAAT GTAAATCCAT CCATTTTGTT
 98801 GTTGGAACTC CTTACTCCG TTTTATTTT AAGCACAGTG TCTTCAGGCT
 98851 AATCCTGCTT CTTCCAGAAG CCTGACTTCT CCAGACACTG CTCTGTGCTT
 98901 TGCACCTGTC TCCTAATGGT CTCTCTCTC CCCATCTCTC ACTGCTGAGT
 98951 GCTCCCTCAG AAATGGCATC CTGATGTACT ACTTCTACT GAACTGTTGA
 99001 TGATTGCTAT TGCCTTAGTG GGTTTTTCC TTTCTGGAAT ATTTATCTTT
 99051 AAACAAGAGA CAACTATCTC AACTCAAGGA ATTTATTTAC TAAAATTAAA
 99101 ATTAATTAAT AAATATTCC TGGCATTAGT TGCAGGCATG AGTGGCTGAG
 99151 TGATTAAACC GGGGTTCCCA ATGCCCTTA ACTCGCATC ATTTGTATGC
 99201 TTTCACAGAA CACCTGTTTT GCTCAGATGT AAGGTCACTT CTGCCCTCTT
 99251 ACTCACCGCT GACCTAATTC TCAAGTCTTT CAAACCTTCC TCAGGGAATG
 99301 CTTTCTTATG ATGACTTAAT ATTTACAAAT GACATTCTGA GGTCTTTTCC
 99351 AGGATCTAGG AATGGTGGCC AAAGGCAGAT CAGCTGGAAG CTCTAAAGCT
 99401 GTGCTTTTTT CCCCTCTAA GAACCTTAA ACTTTGAGT CAAGGCTGTC
 99451 TCTGCAATAA TGGCTCATAC TTCTCTTAG AAGAATGCAA GGGAGCTTTC
 99501 AGATGAGCAG TTTCAGAGGC TTTTAAAAA GAGTAGAATG GGAGGAACGA
 99551 GGCACCATAG CTGGGTGAGC CATTTTTATA TCTCACTGAT CCTGGGTCAG
 99601 CTGCCTCAGT TTAATCATCC ACAAAGGGG ATAGAATTG AATCTACTTT
 99651 GTCAGGTTTT GGTGATGATT AAATGAAATG ATGTGTGGAA AAGAGCTTGT
 99701 CATATAGGGC AGACATATAG AGCCCAGGGC TTCTGTGTTT CTCTCCAAGA
 99751 GAAGCCCTCA TGGCAGGCT AGCCACTCAT CCGGGTTTCA TCTGAGGAGC
 99801 TCTGTGGTGT GTGAGTTTTC CTGGAATGTC CCACAGCTT TGCTCTTCA
 99851 TGCTGGCTGG CCGGTGGCCT CATTAGACTG TGCACCTGGG CTCCCCAGTA
 99901 GTCTCCATGG AAACCATCAG TGCTCAGCTT CCCTGCTTTT CAGATGTTTA
 99951 GTTCTTCTA AACCAGACAT AGCAGCCCTG TCTCCAAGAA CTCTTTTGAA
 100001 CTTCTTGGA GCACCTTTT AGCTGTGCTC TCATGGCCCT CTGACTTAGA
 100051 GAAAAAGAA TCTGGTAGTT TGAACACTCA GAACAGGATT CAATTGGGGA
 100101 AATGACTGAT CTGGCATTTT TATTTTATG TAGCTTCTTT AGAGCTCAGT
 100151 TTCTTTATTT GTAGAAGAAA GGATTGGACT AAAAGTTTTT GAAATCCTCC
 100201 TTAGCAGAAA AAATCTAGT TACTATATTT GAAGTGATGG AAGAGGTTGC
 100251 AATCATCTGG ACATCTGCTA CTAAATTTAG GGAATGATG TCCCCTAATG
 100301 AATTTCCGAC TACAAATAGA GTATATGGT CTCCTTCCCC TTGAAGCTGC
 100351 GTCTCAAATG GACCATCAAC AGATTCTGAT ACAGAGCCTT AGAAACCTTT
 100401 ATGCTGATTG TCACTCAGC TCCTTGACG GCCATCAAAG ATCAAGATTC
 100451 TTTTGAAGAG GCGAGACAGT TGCATATTAT TGAATTGGCA GTGCACAATG
 100501 AATGCATTTG CTGAGTATTG GAGGGTGCTA TTGGAAAGGG TGACCGAATT
 100551 CCAGGGGGAA TGTAAGCACA CTTCTAAAT ATACGAACAA CTGATCCTGC
 100601 AGCAGTTTGC TTGCTGCATG TAAAGTTTGT GTAGAAAATC TCAGTTTCT
 100651 GCCATTGATT TAACTACAT TTAAGTCC AATTACGTTT AGGTGGTTAT
 100701 TTGAGAAATG AAAATTGTAT AAGCTAACAA AGCTTGGGGT TGTGAATTTT
 100751 TAGTTCTCAT GGGGAAGGT TTATGTATTT CTTCTGCTCA ATGAGTGTTA

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100801 AGCCCTTCTC TTGATCTGTT ATGTTTCTC TCAGCTCTTG GGAAGAGAGG
100851 ATTTACGGTG GAGTAAAAAT AAAATCTAAA GTTGGCTTTC TGCCGGGCAT
100901 GGTGGCTCAC ACCTGTAATC CTAGCAGTTT GGGAGGCTGA GGTGGGTGGA
100951 TCACCTGAGG TCAGTAAGTT CAGACCATCC TGGCCAAGAT GGTGAAACCC
101001 TGTCAGTACT AAAAATACAA AAATTTGCAG GGCACGGTGG TGCATGCCTG
101051 TAATCCCAGC TACTTGGGAG GCGGAGGCAT TAGAATTGCT TGAACCCAGG
101101 AGGTGGAGGT TGCAGTGAGT TGAGATCGTG CCACTGCACT CCAACCTGGG
101151 TGACAGGGTG AGCCCTGTGA TTAATCAATC AATCAATAAA TAAAGTAAAT
101201 ATAAAGTTGG TCTTCAAGAT GCCTGAATCC TGAGGTGACC CTGTTTGGG
101251 TCCTTCCAAC ACATCCCAGG TCTGATCCTC ATTTTAAAGA ATTGCTGAGG
101301 GATATTGGAT TACTTAGAAA TGCTTTTGGT TGCAGAATAA TAAAATGCCT
101351 GACTATTGGA GTTTTATGA CATGAATAAA TAAGAATTCT TCTCCTCTGG
101401 AGTTCAGAAC TAACTGTGAA ATGGAGGAGT CAGATGGAGA TCAAATTGCC
101451 AGCTTTATTG CTTATAAGCT GATCAGAGAA TATAGCTTTA GCTTTGTTTC
101501 CGAAAGGGCT TACAGTCACT TTACCCTGAA TTAGGACCTT GCTGCTGCAT
101551 TAGTTTTTCT ATTGCTGTGT AACATATGAC TACAATCATA GAAGCTTAAA
101601 ACAACACTTT TAAATGGCCT TCTTGACCCA CCACTTAAAA TGTTTAATTT
101651 TGCTCTCAGA TGATGTTTCA AAACAAAGGA AAGGTAAAAAG TAAAGGTGCC
101701 AAATTATTTG CAGATGTGCA TAACCAAACC CAAATGAAAC TAAAATAAGA
101751 ATGCTCACAA TTTTCTTTT TTTTTTTTTT AAGTGGAGAT GGGATTTCAC
101801 TGTGTTGGCA AGGCTAGTCT GGAACCTCTG GCCTCAGGTG ATCTGCCCTC
101851 CTTGGCCTCC CAGAGTGCTG GGATTACAGG CGTGAGCCAC CACGCCCAGC
101901 CACACACATT TTTTAAAGCC GGGTGTACAG ACCAAATAAC ATATTAACT
101951 AGATGTAAG AAAGAACCAG AAGTGAATTC ACCAGAAAAAG ACATGCCACT
102001 AAGACAGAAT GTAAATTCTG TAGAAACCAG AGTACTCAAT GCAGAAGGAT
102051 ACTTTTCTAC CAGAAAGTGC TTGCCAACAA ACAACAAAC AAAAACGCCT
102101 TTTACAGACC CAAGAGGGAT GCAAAGTTCT TTACTTAAGG CACCTTTAG
102151 CCAAATCAAA TCACATATAA AGTCAAAAAG AACTCGCCAA AGGGAGGGAG
102201 TCTGAGAATC TGAGAGGAGA GTCACCCAGA CAGAAGAGGC AACAGACAGA
102251 AGCAGAGAGC AGAAAGGGCT CAGTCAGTAC TGCCTCAGT TCCAGGGACC
102301 TCTCATTCCT CTGAGGTGCA CTCACTTTGA TCCCCTTCT GACACCATTT
102351 ATGTACCCCT AAATAACATA CAGACAGAGG CTCATTGAAA GAAAATGATA
102401 TTTACTCAGG GATGGGCATT GCAGTGGTAA CATACTGCC AGTTTAACT
102451 ATGTGTGCAT TCAGGGAGGT AAAGCAAAAA AAAAAAAAAA AGGTTTTTAA
102501 AGGAAAAATG AACAGGATTA CATAATTGTT TTGAGCTAAT TATCCTTGAA
102551 TCAAGGATC AATAACAAGG GTGATGCCAG TCCAAGGTTG GACAGTCAGT
102601 TGCTGGGTAG ATGTCTTCGC AGAAATGCTT TTCTGCATAA CGAGGTGATG
102651 GGTTTTGTGC AAGGTGTAG TTTTGCAGT CTTTATGAT AGCTCTTGTA
102701 ATCAGGCATT TGTGCATGAG AATCCTTCCT TCCTGGCTTT CCCTGACTCT
102751 GTTTGTGAGA GTTTTAAAGCA CAAGTAACCC CATTTTGATT CTGACAATTT
102801 TCATGCTCCC AACACTCATT AACAATGGGT TAAGAATTTG AACCCCTATC
102851 TCACATAGCA AGAAGCCTGG AGGTACGTTG ACTCAGGCTT GTGCTATCAG
102901 CTCCACAATG TCAGGTGTAT CCAGATTGTT TACCTCTTTC TGCTCTGTTT
102951 TCCTTGGCAT GGTAGCTCTT CATCCTCAGA CTTGTCACTC ACATTGCAAG
103001 ATGGCTGCTT CATGACCAAA TAGCACGTTT TCACCAACC TCATATCAGG
103051 AAATACAAAA GGAATCCCT TAAAATTAT CTTTTTTTAG AGCAGTTGCA
103101 TATTCACAGC AAAATGGAGG GGAAGATACA GAGATATCCC ATATCCCTT
103151 GCCCCACAC ACATGTGCAG TCTCCCTCAT TATCAACATC CCGCACCAGA
103201 CTGGTACATT TGTACAATT TATGAACCTA CATTGATGCA TCATTATCAC
103251 CTAGAGTCCA TAGTTTACAT TAGGGTTCAC TCTTGGTGTT GTAGAGTCTA
103301 TGAATTTGGA CAAATTTATA ATGACATGCG TCTACCATTA TAGTATCATA
103351 CATAGTATTT CACTCTCCTA AAAATCCTCT GTACCCTGCT TGTTCATCAA
103401 TCCCGTTCTC CTAACCTTTG ACAATGACTC ATGTTTTTAT TAGTTTTGTC
103451 TTTTCCAGAA TGTCATTAAT ATGGTTTGGC TGTGTCCCA CCCAAATCTC
103501 AACTTATATC TCCCAGAATT CCCATGTGTT GTGGGAGGGA CCCAGGGGGA
103551 GGTAGTTGAA TCATGGGGGC CAGTCTTTCC TGTGCTATTG TCATGATAGT
103601 GAATAAGCCT CACGAGATTT GATAGGCTTA TCAGGGGTTT CTGCTTTTGC
103651 TTCTTCCTCA TTTTCTCTT GCTGCCACCA TGTAAGAAAT ACCTTTCACC
103701 TCCCACCATG ACTCTGAGGC CTCCCAGCC ATGTGGAAC GTAGTCCAA
103751 TTAAGCTCT TTTTGTCCC AGTTTCAGAT ATGTCTTAT CAGCAGCGTG
103801 AAAACGGACT TATACAGTTG TGTAGTTGGA ATCATACTGT ATGTAGCCTT
103851 TTCAGACTGG CTTATTTTAC TTAAATATGG ATAAAGTTT CCTCTATGTC
103901 TTTTCATGGC TTGTAGTCCA TTTCTGCTGG GTGGTGAATA ATATTCCATT

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103951 TTCTGGGTGT ACCATAGTTT ATGTATCCAT TCACCTACTG AAGGACATCT
104001 TGTTCCTTC TAAGTTTGG TAATTACGAA TAAAGCTGAT ATAAACCTCT
104051 GTGCACAGGT TTTTGGTTG AACATTAGTT TTCAACTCCT TTAGTTAAAT
104101 ACAAAGATGT GTGATGACTG GATTGGATGG TAAGAATATG CTTAGGTGTA
104151 TAAGAAATTG CCACACTGTC TTCCAAAGTG GCTATACAAT TTTGTACTTC
104201 CACCAGCAAT GAATGACAGT TCCTGTTGCT CCACATCCTC ATCAGCATTT
104251 GCTGTTGTCG GTGTTCTGAA TTTTCTCAAT TCTAAGTGTG TAGTGGTATC
104301 TTGCTTAAAT TTGCATTCT CTGATGATGT ATAATGTGGA GCATCTTTTC
104351 AGATGCTTAC TTGCCATCTG TATATCTTCT TTGGTGAAGT GTCTGTTAAA
104401 GTCTTTGGCC TATTTTAA TTGAGCTATT TGTTCCTTA TTGTTGAGAT
104451 TTAATGTATA ATGTGTAATG TATTATTATT ATTATTATTA TTATTATTGA
104501 GACAGAGTCT CACTCTGTCA CCCAGGCTGG AGTGCAGTGG TATGATCTTG
104551 GCTCACTGCA ACCTCTGCCT CCCAGGTCA AGTGATTCTT CTGCCTCAGC
104601 CTCCCAGTA GCTGGGATTA CAGGCATGCA CCACCATGCC TGGCTAATTT
104651 TTGTATTTTT AGTAGAGATG GGGTTTCACT TTGTTGGCCA AGCTGGTCTT
104701 GAACTCCTGA CCTCAGGTGA TCCACCTGCC TCGGTCTCCC AGAGTGCTGG
104751 GATTACAGGC ATGAGCCACT GTGCCTGGCC ATATTTTATA TATTTTGAAT
104801 TATATTCCTT TATCAAGTAT ATCCTTTGCA TTTTATATCT AGTATATCCT
104851 TTGCAAATAT TTTCTCCAA TCTGTGGGT ATCTTTTCAT TCTCTGATA
104901 GTGCTTTTAA CAGAGCAGAG GTTTTAAATTT TAATGAAGTC CAGCTTATCA
104951 ACTATTTCTT TCATGGAGCA TGTGTTTGT GTATCTAAAA AGTAATTGGC
105001 ATACTCAAGG TCATGTAGAT TTCTTCCAT GTTACCTTCT AGGAGTTTTA
105051 TACTTTTGCA TTTTACATGT AGGTATGTGA TCACTTTTAA GTTGATTTTT
105101 GTGAAGGGTG TTGACTTGT GTCTGCAGCC ATATTTTGT CATGTGTATG
105151 TTCAGTTGTT CCTGTGCCAT TTGTTGAAAA GACCTTTTTT TTTTCTCC
105201 ATGTTGTCGC CTTTGTCTCT TTGTCAAAGG TAAGTTGACT ATATTTATGT
105251 GGTTCATTTT TGGGCTCTCT ATTCTAGTTC ATTGACCTAT TTGTCTATTC
105301 TTTCTCCAAT ATCATACTGT CTTGATTACT TTCGCTCTAT AGTAATTTTT
105351 TTTTCTTTTT TTTTCTTTTT TTTTCTTTTT TTTTCTTTTT TTGAGACGGA
105401 GTCTCGTCT GTCGCCAGG CTGGAGTGCA GTGGCAGCAT CTCGGCTCAC
105451 TGCAAGCTCC GCCTCCCGGG TTCACGCCAT TCTCCTGCCT CAGCCTCCCA
105501 AGTAGCTGGG ACTACAGGCG CCCGCCACTA CGCCCGGCTA ATTTTTTGTA
105551 TTTTGTAGTAG AGACGGGGT TCACCGTTT AGCCGGGATG GTCTCGATCT
105601 TCTGACCTCG TGATCCGCC GCCTCGGCT CCCAAAGTGC TGGGATTACA
105651 GGCCTGAGCC ACCCGCCCCG GCCACGCTCT ATAGTAATTC TTAAAGCCAG
105701 TTAGTGTCCG TCCTCCAATT TTTTCTTCT TTTTCAATAT TGTGTTGACA
105751 TCAGTCTCT TTAGGAAGA AAAATCTTTC CCAGAAGTTA CCCTGTAGAT
105801 TTCCCTTCT GTCTCATTGA CCAGAATGAG ATCACATTAG CATCTGCAAG
105851 GGAGGATAGG AAAGGAAGTA TCGGACAAAG GACGATAGTA TTGCCATAAT
105901 GGACCAGTGA TTCTCAAAGT TTGGTCCCTC AACCTTAGGC ATCAGTATCC
105951 CTTGGACCAT CGGCATCGGC ATCCACTGGA AACTTGTTAG AAATGAAAAA
106001 TATTTGTGGT CGTGGTGGGG GCGGTGGGGC TGGAGCTCAG CAATCTGTGT
106051 TTACCAAGCT GTCCAAGTGA TTCCAATGCT TAAGGAGCAG AGGAATCATG
106101 TTTATCTCT TGGGGCTGAA CACATTGCTG TGATGAACAA AATTAGAATT
106151 CTGTTAGCGA AGAAGTTGGA GTAAGCAAAT GATAACGCT CACATAGATG
106201 TCAATTAACT GCTAGCCACT GAGATCACTC ATAGAGAAGA TGTCTTCACT
106251 CTTCTTGTG ATAAATTAGG TGGCTGTTGG GATCCTTGAA TCAATCAAGA
106301 TAAGCTAGCC TATCACAAAC AGCCTACTCC CACTCCTGCC AGATCTGCTG
106351 CAACCAGGC AGCTTCTCAG GCTCAGGGGC TAGATAGGGT GGGGAAACA
106401 GCTGAGCGCT GCTTGCTGGC TCTTCAGAGC GTTGTCCCTC AGGTAGAGCC
106451 CATTGGCCCG AGCTAGTTAC CAGGTCCCAT TCGTAGCTGC AAAGGGGGTT
106501 TGGAAATGCAT TCTTTTATCT CCAAGAATAG TAGTGGATGG TAAAATTGTT
106551 GCGCACTGGT ATAGTCATGT TCATATGCTC TAAGATGCAC TCCTGGGTCC
106601 CACTCTAGGG TGACCAGCCT TTCAGGAATT TAGTTCCAGG TCGTTTGTGC
106651 ATCACTCTTC GGGGGGAATA CTACTATTGT GAGACTCATA GATTTACAC
106701 CTGAGAAAAT GGAGCTGTG AGGTGACTTG CCTGGATCCA CACAGTGAAT
106751 TGGTGGTAGG ACCTGGATTA GAACCACTAA TCCTGCCTTA ACCTCTTCCA
106801 GATGGGCTGA AAATATTAAT GTCAGATTAA TCTACACCAT GAAACCAATG
106851 TGGAGTTTAG AATATTTTAG TATACCATAC TAATTAAAGT AAAAAAATT
106901 CTTCTGAGT TCCCAGGGAA ATATCTGGGC AGTTAGCATC CCAAATATCT
106951 GCTTATTTGG GATGAAGGAG GGCTGACATT GGATTCTGAA GCAGGTTTTG
107001 GAAGCAGGCG GCCTCTTCT CCCCTGCTGT GGGGTAGCTG TCTTGCTGGG
107051 CCAGGCTGAT TATCACTTGA TAGGATGCTG TAGGAAAACC AGTCAAATTC

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107101 TGGACTGATT CTCATTTTCT TGGCTCCAAG CTGGACTTTG GCCTCTGGTA
107151 GGAAGTACCT GCTTCTTTTT TTCCGGCTCG GATCAGCAGG CTTTCTGGTA
107201 TTTCTGTAA AACCAAGGGA CACCTTTTTT TTTTCTTCTT TTTCTTTTTT
107251 TGGCTTTCCC CCCGCCCAA GGATATGGCA GAAATGTTTA TTTGCTTATG
107301 GATCCAAATG ATTCTGGGTG TCACTGACAA ATAATAAAAC ATTACCCTAG
107351 ACTTACGAGT GCCAAAATTA CTTGGAAAAT TTAGAACAGG CCACATGTTT
107401 AAGATGGAAG TGATGACAAAT CTCAAAGTGC TAATACGGTT AAATTAGTGG
107451 ACTGATCAAC CACTTTAGAT TCCAGGAAGG GGCATGTGGC GGAAGCCAAA
107501 GACTCCTGCA GGCCTCTGCC ATGTGCCTGG CATGGATCAA GGAGAGGCTT
107551 TTAAGAACAC AATTGGCAGG AAGCTTCTGT TTCTCCCAAG GCATCTTTGA
107601 GCTAGCATTG AGCAGCAAAA GGGTTAACTT AAAATAATTA CTATTTCAAG
107651 AGGCAGGCGC AGTGGTCCAC ATCTGTAATC ACAGCTCTTT GGGAGGCCAA
107701 GACAGAAGGA TTACTTGAGC CCGGGAGTTC AAGACCAGCC TGGGCAACAT
107751 AGTGAGACCC CATCTCTGAA AAAAAAAGA AAATCGAGCC CGGGCGTGGT
107801 GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCAGAGGC AGGCAGATCA
107851 CTTGAGGTCA GCAGTTTGAG ACCAGCCTGG CCAACATGAT GAAACCCTGT
107901 TCCTACTAAA AATACAAAAA TTAGCCTGGC ATGGTGGTGT GTGCTTATAG
107951 TTCTAGCTAC TCGGGAGGCT GAGGCAGGAG AATCACTTGA ACCGGGGAGG
108001 CAGAGGTTGC AGTGAGCTGA GATTGTGTCA CTGCACTCCA GCCTGGGTGA
108051 CAGAGTAAAA CTCTGTCTCA AAAAAAAAAA GATTCAAATT ACTTGGGTGA
108101 GGTGGTAAAG GCCTATAGTC CTAGACACTC AGGAGGCTGA GGAATGAGGA
108151 TTGCTTGAGT CTAGGAGGTT GACACTGCAG TAAGCTAGGA TCACATCACT
108201 GTACTCTAGT TTGGGCAACA GAATGAGGCC CTGTCTCTAA AAATATTTTT
108251 AAGTAAATAA AAAAAATAAA AATTATTATT TCAAACAGAT CAAAATACCC
108301 TGT'TTTGGAA ACTGGGTATT ATTTTCAGCA TTGTAGGTTT AGCTACAGTT
108351 TCCAATACCT ATTGGTAATG AAAAGTTCAA GGGTCTTGGC TGTGCACATC
108401 AGCATTGCAC CCAAAGAGGC AGGGGAGGAG GGCAGAGTGG TAGGCTGTGG
108451 CTTTAGTTTA AGAAATGGCT GCCTTTCAGT AGTGTAGAAA AGACACAATA
108501 TCAGTGAAC TCACTTTACC AGTGCCCAT TGTCTCTGGA GTATCTGCTT
108551 CTAGTCTATG CTGCCCTAG TACATAACAT ATTATAAGTT CCTAACAACT
108601 AACTCAGTAG GATTAATGTT ACATAATAAT GTGAGTTTAT TTATTATTAT
108651 ATTGAGACGG AGTCTCACTC TGTGCCCAG GCTGGAGGGC AGTAGCATGA
108701 TCTCGCCTCA CTGCAACCTC CGCCTCTTGG GTTCAAGCGA CTCTCCTGCC
108751 TCAGCCTCCT GAGTAGCTGC GGCTACAGGC GCGTGCCACC ATGCCTGGCT
108801 AATTTTGTGA TATTTTGTAGT AGAGACGAGG TTTCACCATA TTGGCCAGGC
108851 TGGTCTCGAA CTCCTTACCT CGTGATCTGC CCACCTTGGC CTCCCAAACCT
108901 GCCGGGATTA CAGGCATGAG CCACCACGCC CTGCCGTGAG TTTATTTTAA
108951 TCAGAGAGAA GGCCCTGGTT TTAATGTAAA CAATTGCTTT CTTCCTTTTC
109001 CTAGGCGGCA AGAAGGTAGG AAGTAATTAT TTGAAAATGC AAATAATTTT
109051 AAAGCTTTAT CAATCAAGTC TGTTCCAAAT TAGTTTAAGG ATTTTCTGTA
109101 GCTTTAATGA TAGGGCCAGA ATGTACATTT GGGGTGACCT ACATATATGA
109151 CATCCACAAA ACAGACTACA CAACATTCTT TAATGACAGT CCATGACAGT
109201 TTTTCCATGG ACGGCTCCTT CTTTCCCTCC TTCATTAAAC ATAGGATTGC
109251 TCAGCCTCGA TACTATTGAC ATTTTGGTCT GGATAATTCT TTGTCATAGG
109301 AGTTGTCTCTG TGAATTGTGA GATGTGTAGC AGCATCCCTG GGCCTCTACT
109351 CGCTTGATGC CAGCATCATC ACTGCCCGCA GTTATGACAG CCAAATGTC
109401 TCCAGACATT ACTAAATGTG TCCTCAGGGG CAAATCGCC CTAGTTAATT
109451 TGACCATAGC TATACTGGGA TATAAGGGGA CAATTGCCCC AAAGACTACC
109501 AGGTGCATGC CCTGGTCCCC TGTCCAAATC TTCCACACGA GCTCTGGTGC
109551 CTCCACCAAT GATCCTAATC AGTTTTTCAG TGCTAGCGCC ATTCCGACTC
109601 AGAACTCTCC TCCTTCAGAT GGGTCCTTAA AGAGGGCTTT GCAGATTTTA
109651 TACTCCGGGA ATGAGATCAT TTCTACCAA GAAAGCAAAA ATGCCTGGAG
109701 ACTTGACTCT GATGAGTACA CATAATGACA AATTGTCTG CTATTATTCT
109751 TCACTAGGCA AACCATCTCA GCACTAACTT TAACTGACCC ATAGGGACTT
109801 ATCTAATGTA TGGTTCTTCT TTCTTGGCTT ACCTTTCATA ACTGGCCAGT
109851 ATCCCTTTGG TGTTCCTGT TGTCTTCTGA GGTCAATATA GAACGTTTAA
109901 ATGGCCTTTA AAGTGACATC TCACTCTTTT CTATGCACAG TAAAGATATC
109951 AAACATTGCC TAAAATAGAA CTACTTAAAA TACTGCCTGG ATAGCGTTTA
110001 TCATTTAAAC ATTTTCCAGG TAGCTTTAAC AGAGTCTCTC TCTGTCTCTC
110051 TGTCTCTCTC TCTCTCTTTT CCCCCCGCA AGCTTTGATC ACAGGTAACCT
110101 TCTGGGAATC TGATTGTTAC TTTGGGGTGG GAAGTTATTC ATGAACATCT
110151 GCATGCCAGA ACCTTTGTAG GGAGCCTTGG ATCGGTCATT TGTCTGAGAG
110201 GATTTTGTG AGATAATACT GAGTATTATG GCACTGTGAT ACCAAAGCCT

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110251 AGATATAAGT CACTGATATG GTTTGGCTGT GTCCCCACAC AAATCTCATC
110301 TGAAGTGTAG TCCCCATAAT CCTCATGTGT TGTGGGAGGG ACCCAGTGGG
110351 AGGTAAATTGA ATCATGGGGG AGATTATTCC CATGCTGCTC TTGTGATAGT
110401 GAGTTCTCAT GAGACCTGAT GGTTTTATAA GGGGCTTTAA CCCCTTTGCT
110451 TGACACTCGT TCTCTCTCCT GCCATCCTGT GAATAGGTGC CTTCCACCAT
110501 GATTGTAAGT TTCCTGAGGC TTCCTCGGCC ATGCGGAAGT GTGAGTCAAT
110551 TAAACCCCTT TTCTTTATAA ATTACCCAGT CTCGAGTATT TCTTCATAGC
110601 AGTGTGAGAA TGGACTAATA GAGTCGCTAA TCTGTTTTGA GGGTTTATTA
110651 TGCCAGATAC TGGGCTATCT GGGCTTTACC TAGAGTAAGC TGTACAGTAA
110701 GTAACCCTGC CAAAGAGATC ATTATGTGTT CTTAATTATA TGAGTTTGGG
110751 ATGCTTAGAC TGGTTCTGTG ACTTGTCCAA GGTACACAG CCCATAAATG
110801 ACAGAACTAG ACTTCCAAAC TTGGTCTCCC TGCCCCAGAG TGCATGAATA
110851 GACTTAGTCA TTCCACTATA TGCCCTTTCT TCTTCTCTT GCAATGTAGG
110901 CATAGCATCT GATGGCTCAG AGGAGCCTTC ACAAAGGTT TAGTAAGACC
110951 TGGGGACAGA TAAAATGGC TAGTTGAGAG AAAGATATTG GGCCTGTCTT
111001 CATCTGCTTT AAAAGGATTT TAGTTTCTG ACTTCATGCT CTCTCTCAGT
111051 GTGTTGAATT GCATCATAGC CTCTGGTTCT TTATGTATCT GCTTAGTTT
111101 CCTAATACCA GCTCATTATT AGTTAATATC TCTTCTTTG TGTCTCTTT
111151 TCTTGGAGGT TAATCTAAGA TTTAGGTGTC CCCTTGCTCA TGTCTGCTGC
111201 TATGTACTA ATACAAAGAT GGGTTTATAT TCTGGTATCA CTATAGGACA
111251 TTAAGTAA TGTCAAAAAC CACAATTACT TTTGTACCAA CCTAATAAAA
111301 GAGGGGCTT TACTGTACCA ATAGCTGACT TGTTTTGACC CACCTCTGCG
111351 AGAGCAGTTG CCAGGCAAAG ATAGTCCCCA CTCTGTCTT CCATCCACTG
111401 CTCTACTTTG TACAACCTGC TTAATGTTAA AAACAGGAGG AAATGCACAG
111451 CTCAAAGCCA AGCCTCTTGG TGCCCTGAGA TAGCTGGCCT TGTCTCTCAA
111501 AGCATTCTTC TTTTCTGCG CTCATCAGAA TGCCTCAATG CTCTGCTTCG
111551 ATGGTTTAA GAGCATAGAG TGGCTTGGTG TGGTGACTCA AGCCTGTAAT
111601 CCCAGCACTT TGGGAGGCTG AGGTGGGCGG ATCACCTGAG GTCAGGAGTT
111651 CAAGACCAGC CTGATCAACA TGGAGAAACC CCATCTCTAC TAAAAATACA
111701 AAATTAGCCA GGTGTGGTGG TGCATGCCTG TAATCCCAGC TACTTGGGAG
111751 GCTGAGGCAG GAGAATCACT TGAACCTGGG AGGCGGAGGT TGCAGTGAGC
111801 CAAGATCACA CCACTGCACT CCAGCCTGGG CAACACGAGT GAAACTCTGT
111851 CTCAGTAATA ATAATAATA TAATAATAAT AATAATAATA ATAATAATA
111901 AGTAAATAA AAAGAGCATA GAGTTTGAGA CCATCACCAC CAAGATTTTA
111951 ATTCCCACTG GGGATTTAAC TCAGTCTTAA ACTCAAGGTC TGCTATGTCA
112001 AGTAGTATTA AATATCTCTT CCTTTTAAAGA GCCATTTAGC TCTTCTCTCA
112051 TATCTTTTCA GATTTTCTGG TTTTCCCTAA GGCTTCTGAA ACTCTTAAAA
112101 CATCTCTGAT AGAGGAAACT ATCTAGAAAA TTTTATGGGT ATTCTATTATC
112151 AGTGAGGTCT TTCTCATTTA AGAGATAATC ACTTCTTAGA ATCCCAGGGG
112201 TTTTCAATAAG TATTAATAAA AGGTTTATA TTTTTCATT TTGGGGCTAG
112251 TGAAAGTCTA GTGATGCTTT AGGTCTACAA CATGGTAAAC TGTATTTAAA
112301 GATTCCAGGT GCTTTTGAGT TATGAATTTA ATGCAAGAAT TCTATTAGCA
112351 ATCACATTTT TACTAGTATT ATAAAAATCAG CATAATAGGT GAATGATTTT
112401 CTATGTTTCAT GCTTTATCAC CAATTTTCAC AGGTAGTATT GGTTCCTCTG
112451 GAATGCACTG ATTTAATAAA ATATTAAATC TTTGCTCTCT TCTTATAGAG
112501 AACTTTTAA AAAATTATCG TAATTTTATT TTTCTTTTAA CATTTAGCCT
112551 CATGTTACTT CTGTGAGCCA AGCAAGCAAT GACCTACTTT GGTGTAGCTT
112601 CTAACAAATT AGGTTCCTGA AAATTGAGAG GTGCCCTTAT TGAATTGAGT
112651 GTGCTCATCA CGGAGCTGGG TGTGTGATCT ATGTGTTTCA TGTAGGATAA
112701 GTTTTAGATG ACTGGCATGT CAGTAGTCAT TGATACTTTC TAGATAGCTT
112751 TATGACTTTT TGCCCTAGGG AAGGGAAAAT GTTTAGAATA CACATCATTA
112801 TTGAAAGGTG TGCCAGTGTT CTGAACCATC ACACCCAAA GAGCCAGCTC
112851 CCCTGGGAGG TGACAGTGTG ACAAGCATGT GCAGCCCAT GCTGAGCAGG
112901 CTCTGATGGC TTTGCATAGT GAAGGGCTGC CAACAACTG CACTCTCCTG
112951 AACTGAATCC AGCCCAGGAA ATGTGCATTC CTGTTAGAAG TGCATTTGT
113001 ATTTCTGGG GAGAATGCAT TGCTTTGTAT TTTCTGAGAG GAGCTGCATT
113051 TGTGCATCAT AAGTTTGTAC CTAATGGTTT TGCATATGT CTTGGAAGTT
113101 TACTGCTGAG TTTTAGGCTC CTGCTCATAG ATAGCTGTAG TTCTCATCCT
113151 ATAGGTGGTG GACCCCTAGG AGCCTGAGGT GTCGTTTAA AGGATCAGTG
113201 AATCCTTTTG TGTTCACAGC ATTGCCAGTG GACAGAATAA ACAATATGTC
113251 TCCTTAACAT GTGTGCTGCC CTTTTCCAAA TGTGTGTAGA GGGGTTGTCA
113301 TCAATGATTC ATTTCAAGTT ATTTTAAAGG GTGACTCCCG AATTCATAGT
113351 ATCTATAGTA TCTTTTTTTT TTCTTTTTTT GAGATGGAGT TTTGCTCTTG

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113401 TTGCCCAGGC TGGAGTGCAA TGGTGCATC TTGGCTCACC GCAACCTCTG
113451 CCTCCCGGT TCAAGTGATT CTTCTGCCTC AGCCTCCTGT ATCGCTGGGA
113501 CTACAGGCAT GTGTACCAT GCGCAGCTAA TTCTGTATTT TTAGTAGTGA
113551 TGGGGTTTCT CCATGTTGGT CAGGCTGGTC TTGAACTCCT GACCTCAAGT
113601 GATCTGCCCC CCTTGGCCTC CCAAAGTGTG GGGATTATAG GCATAAGCCA
113651 CCATGCCCGG CCTCTCTCTT TCTCTCTCTC TCTCTCTCGA TATATATATA
113701 TATATATATA TTCTCACTAT CAGTTAGTAC CAAAAGTTCT ATTGTTGTGT
113751 GGGGATCAAG GATATTTTAA ACCTTCAGAA GGGAGTGCCA TACTCAAAAG
113801 TTGAGATCAC TGGTCTTTCA AGTTAGCATC AATTTCATG ACATTCTGGG
113851 CTTTCTTTT TCTGTGGATT TAACATTTT ATCCTGGCCA TAGTCATTGT
113901 TACAAAGATT TTTTTTTTTT TTTTTTGAGA TGAAGTCTAG CTCTGTTGCC
113951 AGGCTTGACT GCAATGGCAC AGATCTCGGC TCACTGCAAC CTCTGCCTCT
114001 CAGGTTCAAG CAATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA
114051 GGCACCTGCC ACTGCCCTGG CTAATTTTGT TATTTTGTAGT AGAGACGGGG
114101 TTTCAACATT TTGTCCAGGC TGGTCTCAAA CTTCTGGACC TCATGATCCA
114151 CCTGCCTCGG CTCCCAAAG CACTGGGATT ACAGCCGTGA GCCACCGCGC
114201 CTGGCCAGAA GTTTTCTTTT CCTCTAAGTT ACTCCAGGA GTTGGTAGGA
114251 TACTTTAGAG CCTGCTTCAA GATTTTCTTT ATGCCTTTTT TTAATTGTGT
114301 TAAAGTGTGC ACAACATAAA ATTTACCATC CTGTTTTTAA GTGTACAGTT
114351 CAGTGGCATT AAGTACATTC ACATTGTTGT GCAACCATCA CTACCATCAT
114401 CTCCAGAACT TTTCCATCTT CCCAAATGAC AACTCTGAGT CTGTTCAATA
114451 ATAACGCTC ATTTCTCTCT CCCCAGCTCC CTGGTGACCA CCATTCTACT
114501 TTCTGTGTCT ATGAATTTC CCACTCCGGG AACCTCATGT CAATGGAGTC
114551 ATATAGTGTT TGTCTTTTG TGTCTGGCCT ATTTCACTTA GCACAGTGTC
114601 TTTAAGGCTT CATGAATATT GCACATGTGT CAGAATTTCC TTCCTTTCAA
114651 GGCTGAGTAA TATCCCCCTG TCTGTATATA CCACATTTTG CCTATTGTGT
114701 TATCTGTTGA TGGACTTTTG GGCTGTTTCC ACTTTTGGT TGTATGAAT
114751 AATGCTGCTA TGAACATGGG TGTATAAACA TCTATTCAAG TCCCTGTTTT
114801 TAATTATTTT GGACATATAC CCAGCAGTGG AATTGCTGAG TCACATATAA
114851 TTACAGATTT AATTTTCTG AGGAACCGTG ACACTGTTTT CTACAGTGGC
114901 TGCACCATT CACATTCCCA CCAACAATGC CCAGGGATT TGTCTTTCCA
114951 CTTCCCTCACC AACACTTGCT TTTTCTGTG TTTTTTTTTT TTCCTTTAA
115001 CTTTTATAGG CCCAAATGAC AGCGTTTGGT AAATTGCTGT CTGACTGCCT
115051 CTAAGTCCTG GCTGCTCCCA TAGCTGCTGT TCTATCACTC TGGGGACTAA
115101 GTGGAGAGGC TGTGCCGTTA GCCTTGCTTC CCTCTGCAC CTTCCCTGTC
115151 TCCCTCCCTG CCCTAACCTA CAGCTGTGTC CCTGTGAGTC TTTCTTCTCT
115201 ACTCGTCAGC TTGGGCCCTG TGCAGCAGAGC TGGTGGGAGG ACGGGTGGCT
115251 CAGTGCCAGG CCGACTAGGG CCTCTGCATA CGGATGACAT CCAGTTTCCA
115301 CCAGACCTTT TTTCTACTCT GAAATCCTTT TATTCACCCA ATCATGATTC
115351 ACTTTTCTGT TCTTCACTGT GGCTGTTTCT TCATGCTCCT CGCTAGGTCA
115401 ACTTGATAAA CAATTATCGA ATAACACTTT TTTGTGTGTG TTCTCAACAC
115451 TATAGGGATA TGTGGCAATA AACAAGGGAT AGTCCTTTCT CTTAAGGAGA
115501 AAACAGCCAT GCATCAAGAC CAGTGTCCAT AATATTGTGC AGAATGATAC
115551 CAGGGCTAGG GCAGGCAGGC TCTGAAGTCA CACCACCTTG GGTGAATGAT
115601 CCATGCTATG TCTACTTCTT ATCAGCTATG TGACCTCAGG CTGTGCCTCA
115651 GTTTTCTTAT TTGAAAAAAT GAGGATAATA ATGGTTCTTG TCTGTTTGG
115701 CACTTAGTTG ACATTGAGA GCAGTGTCTG CCACATAGCC TCAATCAATG
115751 CTATTCACCTA TTATTGTAGA ACATTGTTAG CTATGGGAGC CCAGAGAGGG
115801 ACTTGTTAAG TCTAGCTTGT ATATTTTACA TCACACAAGC ACCTGCCTTG
115851 TCTTGCCAAT GGATTGTTCT GCTCAAGTAA AGCATAGGGG CTTAAAGCTA
115901 AATGTTACTG TGCCTTTATT GGCCTGTATC CCTGTAGGAC CTGCTCAGTG
115951 CTAAGTGCTT TGGAGGTGTT CAGTAAATAT TTATTGATTG TGAATTGATT
116001 AGAGAGGAGA GAGACACGAA CCAGGTCTTT TTCCAAGCAC CCAGGATGTG
116051 TAAGCTTCAC AAATGAAGAG ATGCTTGCTG ATGCTGCCCT CTGTCCTACC
116101 CTTCTGGAA ATGGGCATGG AGGTGGGTGG GGCTGGAGAA GTGGAGGGGG
116151 CCACAGAAAG GTTAGCGACA GAGAGAAAGA AACCCATGGG CAACAGGGTC
116201 TGTATCTGGG ACGGGACCTC AGCCATCAAG CATGGCCTTG GGAGGAGAAG
116251 ATGCACTGGC CGCGATGCAG CGAGCCCTTT CGAAAGGCAA ACAGCACAAG
116301 CAAGAGTGCA GACGGCAGGT TCGTCGGCTC CTCTGGGGCT CCCCAGGGG
116351 ATGCCGTTGC CATTGCTCT GCGTGAAGGA GGCAGTTGT CTTCTTCGTC
116401 GTCGGCCACA CTTCACTGGC TGCAAGTGTT CACGCAGATG TGCTCATGTG
116451 ATCTTACCAC ATACGCAGAT TCTAGTAAAA AAAGAAGAAA AAATCCAAGA
116501 ATGAGTGAGA ATTTATTTTA GCTACATGCT GACTGCCTCT CAGCTTGCCC

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116551 GTGCTCTTAC CAGATCTTGA AAACAAGGGC CAGTTTGTAT TTTTATAAAA
116601 ATGCATCAAA GTGTTACTAA AAGATCCTAA AGGAAGACTA AAGTTTCCTC
116651 CGAAAAGAAG CCTGGCCCTT CAAATACCAA CAAGGGATCC TCGGAAGATG
116701 GGTTTTACTG AGCTCAAAACA CTGTCTCTTC TGTTTAGATA CTGTATTATT
116751 ACATCATTTT CCCTCTCAGA TTGAGTGATG TTTCTCCAT TATTTGTTCC
116801 GTTCCTTGGC AGAAGTGAAT TTCACCATGA ACAACATCTG CAGTCTTTCT
116851 ATACGAGCCT GGGGAATGCT TGAAAGAACT GATACTAAAT TATTATTATT
116901 AATATTTGTT TGTCTACCTA TCCACTCCCC ACCCCAGGT CCCCTCTCAC
116951 TCCCGAGTAG TCACAAATGG GTGTATCGGG CATCTCGTCT CAGTTGTCAG
117001 GACTAGCCCT TCACTTCTA AACTATTTTG CAGATTAGCT TGAGCAATTA
117051 GAATCAGGAA TAGATATCAT GTGGTTAAAA TAAAAGGGAA TTTATCTACA
117101 ATTTGAAAAT AGATTACAGA GAACTTCCAT GTGATTTTTT TAAAAAATA
117151 AATTTTGCTG TGTACTATAA CAGAGTTGGC ACCAGAGCTA ACAAAAAAAA
117201 AGCAAGTATC AACATTTAAA ATGCAGTACA TGACATGTAA ATGCCATATG
117251 GTATTCTTGC AATGTTATTA CCACCTTCTT TCTGGCATCC TTTTCTGAC
117301 ATTGCTGTAT GCTTCTTGAC TCTGCTGCTC TTCAGAAAGC CTCAATTGTC
117351 CTGAGCCCTT TAATCTGTA TTTATATTAG GTGTCTCTCT CTTTATCTA
117401 CCCTTTGGAG GCTTATCAAC CTTTTCCCCA AGGAAGAGGA AGAAGAGGAC
117451 CTGTACAGAT GCGTGTATAA ATATGTGACA CCTGCTCCG TGAGCCACTA
117501 TTGGAAGAGT TTAAGAGTTG ATGGTATTGT CCCCTGTCTA GAAGATGAGC
117551 ACACATTTGC TTCTCTTCTC CTTTCTATTT TTAATAAATG ATCATGTGCC
117601 TTTAATGATG TTTCTAGAAA TGTCTTGAAT TCAAATTATT TTCTATTTTT
117651 AGGGAATAAA AAAAGGAACC CACCAACCAA ATTTTCTGAA AAGATTATAT
117701 GGGTCAAAAT GTTAAAAGTT TGTCATAGTT AATATTTCCT AAAGTAAGAG
117751 CCTTGGTGAT CGTGTTTGGG GAGAAATCTC TGCTTCACCA CGGGAATGTC
117801 AGTGGATCTC TGCCTTTGCA CTGAATGTGC CACATTCTTT CATCTCCAGA
117851 CTTTTGCGTG TGATATTTAT GGTGTTTCAA ACAATGTCTG TACCTCCTC
117901 CTGGTCTCAG CTCAAATGTC AGTTCCTTGG GGAGCTTTTC CTGACTTCTA
117951 AATGAAGGTC AACACCCCG CAAATAACAT CTTGTAGACC CCAAGAATAA
118001 CATTCACTCT ACTGTATTGA TGGTGGGCAT CCCCATCAGC CTATGAGTTG
118051 TGTGAGGTCG GGTCCCATCT GCCTGTTTAC CACTGCATCT TCAGGTGCTA
118101 GCACATGGCC TGGAAACCAG AGAGCACTTA ATCCATACTT GATGAATCAA
118151 TGAATGAACA TTGCTAGACA TAACCTTATA CATCTTGATA TAGAAATGA
118201 CCTTGAAGCT GGAAGTAGGTC CCAGTTACTT GAGAGGCTGA GGCTGGAGGA
118251 TCAGCCCAGC TTGGGCAGCA TAGTGAGACA TCCCCTATCC CTCCTACTCT
118301 CCTAATCCTG CACAATCCCC CTCTAAAAAA AGATAAACAG AGTGACCTTG
118351 GGCTGGCGCT CTGGCTCGCG CCGTGAATCC CAGCACTTTG GGAGGCTGAG
118401 GCGGGCGGAT CATGAGGTCA GGAGATCGAG ACCATCCTGG CTAACATGGT
118451 GAAACCCCGT CTCCTCTAAA AAATACAAGA AAATTAGCCG GCGCGATGG
118501 CGGGCCCTG TAGTCCCAGC TGCTCGGAG GCTGAGGCAG GAGAATGGCG
118551 TGAACCTGGG AGGCGGAGCT TGCAGTGAGC CGAAATTGCA CCACTGCACT
118601 CCGGCCTGGG CGACAAAGTG AGAATCTGTC TCAGAAAAAA AAAAAACAAA
118651 AAAAGAGAGT GACCTTGAAA TCGAAACTAG TATTGTATGC AAATAAATGG
118701 CAATGGGGAA AAAAGTTTCT TAGGCTTTGA AGTCCAATTA TTTTGAATAA
118751 AAGATGGGTC TGTAGGGAGC TGCTCCCTGC TAATGCTTAT TGCCAATGGT
118801 ATTCAATATG AGACACTTTT ACCTCATCAG GCTATACTTA GAAGTGTAAT
118851 TCTACAGACT TATCAAGTCA ATCTTCTTAA ATACAGTATA CAATTACCT
118901 TCACCCAGTG GTTCTGAACC CTGTAATATC CAATATTCTT TTATAGCATA
118951 TATTTATGAA TACTCCTTTA CTACATTGAA ATGAATTCA GAGACAGTGC
119001 ACTTTGCCAA TACAGATAAT TCTGAAAAAT TCAATGCAAA TTTTCTAGCT
119051 ATAATATAAA GGAGAAATAA ATGGAAAGTA ATGTTTCAAT AATAGGTGCT
119101 CTGTTATGAA ACCCTAGGAG ACCTGCTGAA GCAGTGAGTC TTGGCATCTA
119151 TACGTAGAAT GCAATATCTC CAAATGCAGA TTGGTTCAGG TATGTTGTGT
119201 TGATGACTAA GATGTCACAA AGGACTTTTT CTCCAGTGGT GTGGTTTTCC
119251 AAAATAGAGA ACAACTCTCA GCAAGGTTCC AGCTAATCTA TTTACATTAG
119301 AGTCAGATTG TTAATAAATT TGGTCAACTT TGAAAAGATG CAAACAATTT
119351 GTGTGTGTGT CTTACATGTT AAAAGGGAGT TAGGTTCTTG GCTCAGATAA
119401 TTGTAGACAT GAGTTTTTCT CAGTGGGACA TTCAAAGCTC ATGCTAAATG
119451 TGGGATGGTT CTGTGATTTG TGGCACTGAT TGTGTATTG CAGGACATCT
119501 GAACGTCTTT GACCTCCTCC CAGTACATGC CAAACGTGCC CCTCCAGTTG
119551 TGACAACCGC AAACACCCTA ACAAGTTTAG AGACCACCTC CTAGGGTGTT
119601 GTAATCTAAA CAGGGTTATA AACAGAGCTT CCAGGGGGCT CCCATGTAAC
119651 TTTCAAGAAT TTACATATTT AATTTCTATT CTCGTGAAAA TGGCCATGTT

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119701 CCAATAGTTA AGCCTCTTCC CTTGATGTAT TTCCCATGCC ATTAATATTC
119751 AGTTCTATTC CACAAATATT TATTATATGC ATATGTGTGT GTACATCCAT
119801 CTGACTATAC CTTTCTATGT TATGTACCTT TACTAGAATT CCAAATTATA
119851 AAATCCTGTC AGTTTATCTC TTGCTAGATG AATGGTTTTA TTGTTTTTGT
119901 AGAATATTTG CTTTAAACAG TACTCTCATA TTTTCTTGAG GTGCTAAAT
119951 AGAGGAGGCA GCTGTAGAAA AATGCACTAC GGGCCAGGCG TGGTGGCTTA
120001 TGCCTATAAT CCCAGTACTT TGTGAGGCCA ATGTGGGCGG ATCATGAGGT
120051 CAAGAGATTG AGACCATCCT GGCCAACATA GTGAAACTCC ATCTTACTAA
120101 AAATACAAAA ATTAGCTGGG CATGGTGGTG CATGCCTGTA GTCCCAGCTA
120151 CTCGGGAGGC TGAGGCAGAA GAATCACTTG AACCCTGGAG GCAGAGGTTG
120201 CAGTGAGCCG AGGTCACGCC ATTGCACTCC AGCCTGGGTG ACAGAGTAAG
120251 ACTCCATCTC AAAAAAAAAA AAAAAAAAAA GAAAAGAAAA GAAAAGAAAA
120301 ATGCACTGTG CCAGGCACTT AGAACATTGA GATGAAGGAG CACACTGTGT
120351 AGTAGGAGAG CACATGGATG GATGGACAGA CAGTGATGCA GGTGAGCAG
120401 TTCTATGGAC AGGGGACCAT GCAAGGGTGA AGGAACATGG ACAGCAGAGA
120451 GCAAGAACTG GAGAGGGCTT CCTGCAAGAG GTAATGTCAG AATTGTGTGT
120501 GAGGAATGAA CAGGAGTCCG ACAAGCATTA AAAAGGGCGA AGAACCTTAT
120551 CCTAGCAGAT GGAACAGCCC TTAAGGGG ACAGAAGCTA AAAAGAAATG
120601 AGCTATGAAG CCATGAGAAG ATGTAGAGGA ATGCTAAATG CATATTGCTG
120651 CGTGGAAGAA GCCAATCTGA AAAGGCTACA TGCAGTATGA TTCCAACCTAC
120701 ATGACATTCT AGAAAAGTCT AAAGTATGGA GACAGTTACA AAGATCCATG
120751 ATTGCCAAGA GCCTGGGGGA AGAGAGGGAT GAATCGGTGG AGCAGAGAGG
120801 ATTTTATAGG TAGGAAACT ATTGTGTATG ATACTATAAT GGTGGATACA
120851 TGTCACTAGA CGTTTGTCCA AACCCTAGG ATGTACAGCA CCAACAGTGA
120901 ACCCTAATGT ATACTATGGA TTCTGGATGA TATTGTCAGT ATAGGCTCAT
120951 CACTTGTAAC CAGTGCCTA CTCTGGCATG GGATGTTGAT AGTGGGAAG
121001 GCTGTGCATG TTTGGGGCGG GGGCTATATG GGAGATCTCT GTACCTTTCT
121051 CTTAATTTTG CTGTGAAGCA AAAATGGTTC TAAAAAATC AAATCTTGAA
121101 AAAGGCACTG AAGTATAAAA TGGAGCAGTA TTGGGGCACC AATAAACCAT
121151 CCAGTCTCTC CAGAACTGCA AACTAACTGC TACTACAGCA AGAGAGAGGG
121201 GTCAGCAACT ACCTGCCTGC AGCGGGGGTA GGGGGGAGTT GGGGGAAATG
121251 GCGGGGGGTG GGGGTCCCTG ACAGTTTCCT CAGAAGTGGG TTGACGTATT
121301 CTGGAGGAGG AGGAGGAGGA GGCAGCATGA GGCAGCAGGC AGGATGCATT
121351 TCTTGAAGTG GATCATGGCC AGGTCCTTAC AGCTCTCCCA CTGCCACCTT
121401 TGGCAACAT TCCTGGGATC CTGAAGGCTC AGACAAGGCC CATCCCTCTT
121451 ATGTTACCAT GGGGATTATC TCTTCCCTCT TTTCTCTTTT AGTTTCCCT
121501 CCAAGGAAGG GTTGTCACTC CTTTTCCAAA AGGAAGAAGG ACCAAGTGAA
121551 TGATTTTCAA GGGCACAGTG CTGTTATTTT TCGAGGGAAC CTCTGCCATG
121601 TTCTTGAGCA TGTTGCTCGT TTTCTCCTTC CCTTCTCTTC TTAGCCCTCT
121651 CCCTCTCGCT CTCTCCTACC TCTCCCCCTT TTCTTTTTC TTTCATCACA
121701 AAGACTACAA AGAGTATACA TGGTCACTGT AGAGGCCCTG GAAAATGCAG
121751 GGGAGTGCAA AGAAGAAAGT AAAATCCTGT AAATATCCTT TGTCCAAAGA
121801 AATCCACCAC TAAACGTTG ATAATCGTAC TTCTGAATCT TTTCTCTGCA
121851 TCTACATTTG GCCCAATGC CTGGTGTCTC ACTGGCCCCA CAGTACCCCT
121901 CCCACCTGCT ACCTACCCTG TCCAAGTTTC CCTGCCCTCG GGTACTGGCA
121951 GGGGTTGTCA CCGTGTCTTG GCCACAGCCT GTGCCTTCCC TGTGTACTC
122001 CATCAGCTCC TTCTGGATTG CTGACCTCTG CTCTAACCAC TGATCGTTCA
122051 TGACAATTTT GCTACCCACC TTCTGCAGGT GACAGATCCT TCTGCCTCAG
122101 AAGGGGAGT GCTACTGTCC TGCTGTCTTA GAGCTAGGGG AGACGGACAC
122151 CACTCTCCCC GGTAACACTA GATTCTCAGG AATAGATACA ACACCTTCCA
122201 AACTGCAGCT GACACCAGCT GTACATTGTA ACAAGACTTT TAAGATTTAG
122251 GAATGTCAGA GAGATATTAC CCACAGCAGT TACATCACAT CTGCTTACAG
122301 TCTGGCTGTT CTTGGAGCCC AGAATTCAG GCCTGTCCA GGGTGTCCAA
122351 TTGAGCTGTG TCCTTGACCT GCCTCGAGGC AGCTGAAGCC AGCTTGCCCT
122401 GACCTCCAGG AGTAGCTGTT GCAGGCAGGC AGCTTAGCTC AAAATGAGAG
122451 AAACATATGC TAAATTAAC AAAAAAGAAA ATAATTTTAA AAAGGATATT
122501 GGATAGCTAC AAATCCTTG GGATGGTTGG AAACCCAAAC TGGGAAGGTA
122551 CCTTGTTAAA AACAATGACC AAATCACACC ATGGAAGTGG TCCCGGAGGA
122601 AGCCACTGCT GTGTCTGCCC GGGCATATAC AGGGCGGTGG CCCCTGGATG
122651 CTGCTGCAAG AACCATCCTT GTGACTGCTC CTGGAGTGGG GCATACCAAC
122701 ATTGGTACCA CCATCCCTGG AATGGCTTCC ACAGGTCCC TGTTCCTTTA
122751 TATAACATCC AAGATATGTC TGCTCCTGCC TGCCACCCCA CCTCCCATGG
122801 AAGCTCCCCG CTGATGCTTT CACTTCCATC TTGATCAAGG GCAAGGTTTA

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122851 CCTTCCATGC CCACCCCACT CAGGGTTCCA GTCCCTCACC CTCTGTCGGA
122901 GGACCTAGGA GGATCCAGGA CTCTTGAGAG CTGGGCTGTG CACAGGTGGT
122951 GAATCACCAG CAGAAAGCTC TGCATCTAGT CTCTTCTCT TGGCCTCCAG
123001 ACTGGACGTT TTGCTTCCCA CCACCCACCC CCCGCAACCG GAAGACTCTA
123051 GGAAGATCTC GTCCCTCCCA CTGTACTTTT GCTCCAGGCT GAGTGGCCAT
123101 TCCGCTTCT CTCTGTCTGT GTTCCTAACC CGGTCTTGCC TACTGTCTGG
123151 AAGAGGAGAA AGTGGTCTG TAAGTCTGCC TCTGAGAATC TCCACACCTC
123201 TTTTCAGAAAT GGTCTGGGGA GTGGCGGGTG CCAGTGAGAC GAAAGAGGAG
123251 GACGGAGGAC AGAGGACTCT TAGATGACTA CTTCAAGGTT TAACCCTGTT
123301 ACATCTGCAT GGGTGTGGTT CAAAGTCTGA ATTATGTCTT TATGGCTGGG
123351 AAAGCCTGGG TCACATGCTT GTCTCCTCAT AGCAGGAGAG GCTGGGAAAG
123401 TCAGTAGGTG GTACATTGCA GCTTCTGTAC TGGGAGGAGG TCTCTGTCTT
123451 TCACCAAAT AAAGAAGGAT GTTCAAATTA TTGGTGGGCA AAAAGAATGA
123501 CAAGGATCCT CTGACGTGGA CATGCCCTGT GATCACATTA GCTCTGTTTG
123551 GTCACAGCAT GATAGTGGAG TGGCTTGGGC GACCTATGGC AGTATCATTG
123601 ATAATCATTT ACCATACACC ACAGGCTGAG CGTCACCAGG GTTGATCCAA
123651 TTCCATTTTC TAATCTTCT CCTAACATGG GGTGAACATC AGGAGGCCTG
123701 GAGATCTTCT TTTGTGCTT TTAGATTCTC AGTTTCTGGT CCTCTGAGAA
123751 GAACTGTTCA AACTGTTTCT GCATATCTCT ACTAAACACT TTGCAGGAGC
123801 AATGGAACTCT AGAAGTGCAT TTTAAAGAGA ATACTCTTGT AAAGGAAATA
123851 GTATCTACAG AGATGCAACC CTACCAAAGG GTGGGGCACT GTTGAATACT
123901 TTATCTTATG GAGCATGTGT CCCTGGAGTC ACAGCCTTGG GATGCCTACA
123951 TCTGCTTTCA TTTGCATAGC TAAACAGCCC AGTCTCTTCA TGAAAGGTAA
124001 TAGTCTACTT TATTCATTAC ATTTAGCTCC ATGAAAGAGT TTGCATATAA
124051 CTTAATTGTT TTAAGAGGAA AAAATGTACC AATTAAGAGC CAGGACATTT
124101 ATTATGCATG TTCAGCAATC AAAATAGGCT TCAGTGTAGC CTTCTATTTT
124151 TTTTTTCTT TTTTGAGACG TAGTCTCACT CTGTTGCCCA GGATGGAGTG
124201 CAGTTACATG ATCTCGGCTC ACTGCAAGCT CTGCCTCCCG GGTTCAGGCG
124251 ATTCCCTGCG CTCAGCCTCC CAAGTAGCTG GGATTACAGG TACCTGCCAC
124301 CACACCTGGC TGATTTTGT GTTTTGTAGTA GAGACAGGGT TTCACCATAT
124351 TGGCCAGGCT GGTCTCGAAC TCCTGACCTC AAGTGATCCA CCTACCTCTC
124401 GGCTCCCAA AGTGCTGGGA TTACAGGCGT GAGCCACTGT GCCTGGCCCA
124451 GTGTAGTCCCT TCTAAGCAA TCCATTCTAA TCAAATGAAG GAACAGTGCT
124501 CCTCTTAAT AATCATAAAT AAGTGATAGA TGAATAAGGA AATGAATCAT
124551 GTATGCATTT ATTTGTCCAC AACACACAAT TGGAGCTGGC ATTTCTCTGA
124601 GGCATTTGTA TAAACTTAG ATGAGATCAC GTCCCTAGG ATGTCAAGGT
124651 ACTTGCCCTG ATTTCTGCCAT GAGGCCTCCA ATGGAACTT TGTCAGGAGT
124701 AGAAAACAGC CAATGTATGT GAAGTCCAAG TTCATTGGCA CCTCCCTAGC
124751 CTCCTTGCAG GGTGTGTTCT CTCCATCACT AATCCCCTGT TTTGGATCAT
124801 TTGCAACAAC TCCCTTACT ACGAAGAGGG AATCTTGAGG TATGAGCAGT
124851 AAATATGGAG ACTGTGGTAG GCAAACAGTT CCACAGTGTC ATGAGGTCCC
124901 TTTTACACTC TCTCACTCTG TGGATTCTTT CCCCTTACA ACACGTCTGA
124951 TTTATCACA GCTGTGATTA ATTATTTCTT TGCATGACTG TTTAATGCTT
125001 GTCTCAACTC CTACTAGCTC TGTGAGACTG GGGGCCATTT TGTTTTACTC
125051 ACCGGTGAAG TTAGCTCAAT ATCTGACAGA GAGTAGGTAC ATGATAAATA
125101 CTCATTGAAA AAAGGAATAG AAAAGTTATA GAGTTCAGCT ATATTATAG
125151 CTTGAAAAAT ATGCTAAAGG AATTTTCTCA TTTGTAGGTG TTCCTGTCCA
125201 GTTCCCTTAG TGCAGGCCTT CCCAGTGTAG GGTTTATTTT TGCATGACTT
125251 TCTATAAAGC TGTATTTCTT TCTTATCTAA CTTCTCGTTC CTAGTCTAAC
125301 TAGAAAAGTTC ATGCATATCC CTTTCTCCCT TCTCTCCATT TTCTTTTAT
125351 CTCTGAAACA ATTAGGTACA CACGTAGCTG GGAAGCCTTC TTGTATGCCT
125401 CCAGAAAAAT TCTAGATCCC TCAAATATT GTTCTATCTC TTCTTTCTGT
125451 ACCCCAATTT TTTTCTCAAT TATGCTCTTA AATTATCCTT CTGAAAGATT
125501 TTCTAATTTT GTTTGCTTCT TGTGCTCTT TTCTCTTCTA GTTCACACAC
125551 CTTTCTCTGT AGATTTCTT AATGCTTATT TTATTATTAT TTATAGTTTT
125601 ATGTGGACAA GATCCCTAG ATGCTTACAT TAAAGTATT TGTCTAAAAA
125651 AAGAAGGAAAG GAAGGAAGGA AAGAAGAAAG GAAGGAAGGA AAGAAGAGA
125701 GATAAATATG GAAAGAAAGA GAAAAAAGG AAGAAGGAA GAAAGAAAGG
125751 AAGAAGAAAG AAAGAAAGA AGAAGAAAGA AAGAGAGAAA GAAAGAAAGG
125801 AAGAAGAGAA AGAAGAAAG AAGAGAAAGA AAGAAAAAGA AAGAAAGAAA
125851 GAGAAAGAAA GAAAGAAACT GTCTATTGGG AAGGGCGTTG TTTACTGCTT
125901 ATCCAGCAAT ACCCAGGTAT TTGTATAGGT GTTGACCTAA ATCTATCTGA
125951 CCTTGAAGGC TGTCTCAAA TCTTCTAACA GGCAAGATAA ATAAGGTCAC

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126001 AGAAAATGCA TACCTGTTTG TCATTTACCT TTATTCCTGG GCCTATAGAT
126051 AGTTCTTCTG TCTAGTAGCC TCTGGGCTAC TCATGGGAGT GGGGATAGGG
126101 ATCAATATGAC AACTTTCTTC TCTTTTACGT GTTCTGGGTA CTCTTGGATA
126151 CTGGTTCCAG GGAACAGCTG CATAGCTAAG AGATGGGTGG GAAGGACAAG
126201 AAAGAGTAAA GTGTTCTTAG AGGAGCCAGC GAGGCAAGGG GTGTTTACT
126251 GACCTAGTCT GTTTTATGGC TACATGAGAA CCCTAACACT GCTCTCCCT
126301 TGCCCTGGCT GCTTTTCCAG GTTCTTGTC TCCCCAGACA GCTCTAGCCA
126351 GGGCTCAGGG TTCCTTAATG GCTGTCCCAA TCCACTCTTC TTTTAGCAGA
126401 GCACCCTTAG CAAGAAACCC ACTGTAATCT CACCCTACTT TTCTGCTTTT
126451 ACAACATGTC TTCCTTCCGG GTGAACATTC ACAAGCTAAA GAAGGGAAC
126501 CACCTTCCCT TGAGGAGAGC TTGCTGAACA CCAGAGGATT TCACCTCTTT
126551 CCCCCTTCAT AATGGAATAA TCACTGAGCT TTCTGCTAGA ATAAAAAAT
126601 CATGGGCCGG GCACGGTGGC TCACGCCTGT AATCCAGCA CTTTGGCAGA
126651 CCGAGCGGG TGGATCACTT GAGGTGAGGA GTTCAAGACC AGCATGGCCA
126701 ACATGGCGAA ACCCCATCTC TACTAAAAAT ACAATCATT GCTGGGCGTG
126751 GCAGTGCCTG CCTGTAATCT CAGCTACTCG GGAGGCTGAG GCAGGAGAAT
126801 CGCTTGAACC TGGGAGCGG AAGTTGCAGT GAGCTGAGTT TGCGCCACTG
126851 CACTCCAGCC TGGGCGACAA AGTGAGACTC TGCCTCAAAA AAATAAAATA
126901 AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA
126951 AAATAAGACA AAGGAGATGA TAAATTAAAG CCTAACATTA CTATATTCCC
127001 TTTATACTGA AGAATATGGT TTATATCTGT GGAAGATGA GTTTCCTAAT
127051 ACAACCTCAG AATTAGATAG GAGATCACA GGGGTAACCT CCAAAGGAA
127101 GGGGAGAGGA AGGGCTGGG TTAACAGTTC CTGGGTCAGA ATAAGAGTTG
127151 AGTGGCCATG TGTATTGCAG CAGGTGAGC TCCCTATACA AGGAAAGCAC
127201 TGGGGCGGAA AATGAGCATT TATCCTATTA GAATGGTCTT GTGCCTTCAC
127251 TCCCTGTGCA CTGCTTAGCC AGGGAACGTG GCCCTTACAC CTTGTTAGCC
127301 AGTGGAGAAA GAGTGAGTCT ACCTTTTAGC TGTCTGTAGC ATTGTTACTG
127351 TAGTATTATT GTATGCTTCT GTTTATGATG GTGGAGAGGC CATTTGAGAT
127401 GGAGGCATTG TTCATCATGC TGCTGAAATT TGAGTAGGAT AAATTTAGAA
127451 TTTGGATAGG TGAGCAGCTG GGAGGGGCAT CTTTGGGAT TGTCAGGAGT
127501 TACTCAGTTG ATGTGGCTCA TCAGCAGGTG TCCCATCTC CTTACCTTTC
127551 CATGGGCTTT CTTTCATGCT TCAACCAAAG AGAAGGACCC TTCTTCAGTT
127601 AAGGATTGT CTGGATGTT TCTACATGTG GTGTGATCGC TTATGAGTTT
127651 TCCTGCCTCT GAGACCTACC TTCTGAATGC CTGACTGACA AAGATTTAAA
127701 GGTCTGCCAT TCAGTTGGC ATGCTTTTAT ATTCCACATG CCAGAGCTAC
127751 AAGAATGTTA TTATTTCTTT TCTTCTCTCC CAGGTGATAT ATTTGGTCAC
127801 CTAGGTGTCA TTAGGTACTA AGCTTTGCCT TCAATATCTA CCAGGGTGGG
127851 GCACCATGGA CAGTGCCACA AAGACCTTTT CAGACAAAGG CTCAGATCTT
127901 CCTGCTGGAC TTTGTGTGCA AGAGGAAGGA ACTTTTCTT TTCTTTTTC
127951 CCCTTCTCTC TCTCTCTCTC TCTCTCTCTC TCCCTCCCT CCTCTCTCC
128001 TTCTGTTTCT TCCTTCCTTC CCTCCCTCCT TCCCTCGAAC TGCCATGTCC
128051 CTTGCAACTA GAATGGTCCC TGACATTTAA GGTTTTAAAT AATTATGTGC
128101 AGAATGAATT AAATGCCAAA TCTTGTGTTC CAATAGCGTA TTATCTTCAA
128151 ATGTTAACAG CAACCAGTTT TTTAGAATAG AAACTTTTG AAAATTTTAA
128201 TTAAAGTCTT CTGTCAGTGG AACAGTTGAT TTTTTTTTTT TTTTTTTTTT
128251 TTTTTTTTTT TTTTTTTTAG TCGGAGTCTC TCTCTGTGC CCAGGCTGGA
128301 GTGCAGTGGT GCAATCTTGG CTCGCTGCAA CCTCTGCCTC CCGGGTTCAA
128351 GTGATTCTCC CTGCCTCAGT CTCCTAAGTA GCTGGGATTA CAGACATCTG
128401 CCACCATGCC CAGCTAATTT TTGTATTTT TAGTAGAGTT GGGGTTTCCC
128451 CATGTTGGCC AGGCAGGTCT TGAACCTCTG ACCTCAGCCT CCTGAAGAGC
128501 TGGGATTACA GGTGTGAGCC AGCATGCCTG GCCTGAGTTT TTATTATTTG
128551 TGAATTTTAT TTTTTTCCAT CCCAGATGCA CCTATATTGG TAGTCTAGTG
128601 ATAAAAACAA TTTACCCATA TATACCAACA TCTTTTCAA GAACTTTGCA
128651 TAGTGAAACC AGCAAAGTAC TGAACGGCC AGTCTGTCAT AGGTGTCTTG
128701 CAACATGACT CAGAGTCAGA AGCTGGATAT AAACCTTTTT CTGTGTGTGT
128751 ATATATGATC CATTGTGTGA TTCGGCTTTT GAGTGGGACT TTTTCAGTAG
128801 GCTTCTTGAA GGTTCACCTT CACTATTCTC ACTGATGTGT GCTTACAGCA
128851 TCTCTGCCAT GGAGATTTTA GGCAGAGAGT GTTTAAAAGC TCTACTCATA
128901 GTTTATAGAA TTGCTAGTGC CACAAGGCCA TTCATTGTGG ATGATGAAAT
128951 TATTAGTTAT AAGTGAACCT TCTAAAATAA ATCTTGGGAG AAAACATGTT
129001 ATAAGAAAAT GAAGTCAGTC CTCTTACTAG GCAGTCCCA TCATCTTTCC
129051 ATTTTGAGAA ATTATCCTCA GTTCAGATGT ATTACTATGG TGATGTGTTT
129101 GCATTTCAC AAACCAAACC AAGCCGTAAA CTGAGCTCTG CATGTTTAGC

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129151 TTCTGTCTTA GGATTTTAC CGCAGTGTCT TTATTCTTGA GTAAATCCC
129201 CGACATCCTG GCTAGAAATC ACAATGAATA AATAATTCC CAGCCAGACA
129251 AAACAATCTG AATTGCTAAT CTCAGAATTC TAAGAAATTA CATAAAGATG
129301 CAAACAATGG GGATTAAGA GGGGGTAAAA ATTAAATGAA AAAATAGCCC
129351 ACAAATGAAT GGAAATATAC ATGCTCTCCA AAATAACATT GTGGAAGTAA
129401 ACAAAAACAG ACAGAGAATT ATGCTTAATG AGAATTGGAC ATGTGGCTTA
129451 GCCCTCTGAG GCCTGAAACA AGTAAACACT TCCCGAATTG TCAGTCCATA
129501 CATCCCTCTC TCAAAAGAGA GCTCTTAGAA CTGGCTCCCT CTCCTCCTGT
129551 TTACGAAGCT TACTTGGTCT TTGGAACAAT TGCACATATA ATTTTAACAA
129601 CTAAATGAAC TCTACAGGAG ATGGGTTTG AGTACTTAAA AAATTCCTAT
129651 AGTTTGTATC AATCAGATAC GGGAGATAGT TTTGCAAAAT ACTGTTTGTG
129701 TAAAGAGAAG GGAAGAACAT GCGCTCTAGT CTAACCAATC AACAAAGTGT
129751 GAAAACACGA TTTAGACAGA AGTACAACGA CCATCCTATC AGTTCTACCC
129801 AAATATCATA TCAGACCATC TCTTCCCTGA TAACAGTTT GTTAGCCTAA
129851 GGACACATTA GCTCAGTTAG ATCTGGGCTC TCACAGAGCT TTCTGCTAGC
129901 GGCTCTGCTT ACTGGTAAGT AAGCCATGCA ATTTTGCCTA GCAACCCAC
129951 CGTGGAAACA CAGCTCCATT CTGTAAGTGG CAGGGGATG TGGCAGGGAG
130001 GCAGGGAGAG TGAGGTTTGT GCCTCTCAGA ATCCCTCTGC AGCTGGTTCC
130051 TGACATCGCA AACGTTATCT GCAATTCTTG GCAGTTTCGG AAGGATGATG
130101 AAAAATGGGA CGGGGAGGTG GCTGAGCCTG GGGTTTGGGA AGTAGGATGG
130151 AATTAATTGG AAGGCAAATA AAAAAGCTTC CAAGATTGTG AGCTGCGACT
130201 GTCTGAGAGC TCAAACCAGA GTTGGCAAGA GGAACCAAAG GAGAATGAGG
130251 ACATTTTGTG TCATTGACAA TGAGGTATAC AATATATCCA GGAAAGGACA
130301 ACCAGCAGCG ACCTCTGAA GCTAAACAGA GATTATCTTA AGCCACATAT
130351 GAGGGAACAT TCCTCAATGG CAAAGAGAAG CATTAAACCT GGGACTGTCT
130401 ACGTCTAAGG AAAAATTGGA GCATTTACAT TAAAATGGCC TGTTAACAAG
130451 CATTGAATAT TAACCAGGCA CTGTGCTAAG TGTTCGACA CTTGTTAAT
130501 CTTCCAAACA ATCCGATGAG GTGGGATTC TTATCTCCAT TTTATAGAGG
130551 AAAAAAATA ATGCACAGAG AGGTTGAGAA ACTTGCTTAA GGTCACTCAG
130601 CTATTTAGCA GTGGGTTGG GATGTGTCTC AGGCAGTCTT TCCCTAGACT
130651 CTGTGCTCTT AAACACTACT ATGGTTTTC AGCAGCAGTG AACAGTTACA
130701 GGGCTAATGG GGATAAGAAA ACTGAAGATC ACCACACGGC ACATGAGATG
130751 GTTTGTGATT CCATTGTGAA AGCTGCAGTT TAAAATGTTT AATTAAGGCA
130801 ACTTTTTTTT TTTTAAATA CCTAGAGGGC AGCAAAAACA TGGGTATCTA
130851 GAATAACAGA TATTGCTAAA ACCTTACGCC CACAGCACTT CTTTTTATAG
130901 CAAAGTATGG GTATACACAT ATTTTCATAC ACCTACACAC ACATACACAT
130951 GCAAGACGCG CATTCTTAA GTCCCTAAAA TACCCTGATA ATTAATGCT
131001 CCAAACATTC TCTGAGTGTG ACCCTTGGAT GTCTAGGAGA AGCAGCCCAG
131051 GAACACACTT GTTAGCCGGG GCAATGAGTA GTGGTGAAT GTTTACCTTG
131101 CTGATAAAGT CTCCAGTAGA TGATGCAATT AAGATGCCAC GATCTAGCCT
131151 TTGTTATACA CCTCCTTGTC TGCCGTCAAA CAAATCCACC GCTGTCTTTC
131201 CCCCTTTC CTCTGCCCA TCTCTGAAG TCCAGGAACG TCTCCAGCTT
131251 CCTACGTA CTGAGTCTC TTTTGCCAAC CTCAACCTCA TTTAGATTGC
131301 AATTACATTC ACATCTTAAT TTATGACTTA ACAAGCATCT CACAAACATT
131351 TAATTCATTC TAATTCATCT ATGCATTTGA GGAGGAATAT TTGAGGAGGA
131401 ATGGTACTCC CATTGCCAGC AATTAGATTG ACTTAATGAT CTATGGCGAA
131451 ATCTCCTTTT GGGCTTTGAA CTTTTCATAC ATTTCTGCAA ACAAACCTAG
131501 GCTAATTAAA GTAAGTTCCT GGATTCTCAG AGGGGCTTAC CTGCCTTCAC
131551 AAAATCTCC TGTAATATCC AACATGGAAA TTTATGAAAT AGACAAAACCT
131601 TTCCCTGCAG TTTTCAGGTA ATTTATCTTG TTACGACACT TTCATGTGTG
131651 GAAAAGTCGA TATTTTCATA TATAGTTTCA ACAATATCAA TAAATTGTAA
131701 TTTTTTTTTC AGATGGCTTC TCTGAGGAGA TTAGGAGGGT TTCTATATCA
131751 AAGCATAGAT CAAATTATTT TTCCCTGTTC CCATTTTATA TACCAGATGC
131801 CTTCTTAGGA GTTAGAAAAG TACCTCCTTT TTACAAGGAA GGATGGCATT
131851 TCTTTAGCTT TTCCTGGACA GATCACCCGG TGACCATTTT TTATTCTCAG
131901 TCTTCCTTCA CAGAAGGAC AGAGGACTGC CCATTTTCAG CAGGAGTTAG
131951 TCTGATTCT TCTGTTAGAT GCAGACGACT TTGTTTGACA ACTTTCTTTG
132001 GGTGGTGAA TTGTTGAATT ACTTGAAAAG CTGTTTCCGT TGTAAAGCAC
132051 TGGACTGAGA ATTAATTACA TCAGAATTCT AATCTCGGCT CATTAGTGGC
132101 ATCATTTTAT GCAAGTCCCT TAACCCCTCT TGGCTTCAGT TTTGCATGTG
132151 TAAAATGAAG TATATAAAGC AAAGGTCTCT CTGTGCTTGG TGCGATGAAG
132201 AGGATGCAGG TCTCATGGTA CGGATTTCTT ATATTGATTG CCCCAAATGT
132251 GGTGTACGTT TGCAGAAAAT TCATCTAGGC AATGTAGAAA GGCCATACAT

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132301 TCTGGTGTGA AACACATCGT TCATATATTT ATGCTAGTAT ATGATACCAG
 132351 GGCCTCCTGA TGACAGTCTC CAGCACCAAT TCTGAGAATT GCGAGGATTT
 132401 TTCAGCTTAG AGTTTTTCAG CTTAGAGTCA ATTCCAGTGT CGCCTTCAGC
 132451 ACATCCAAAG AGAATATGAC CGATGCTACC AGTCCTGCTC CTGGACTCCA
 132501 CTGGTATGAT TCCTTTGCCC CAGTATCAGT CTAATTCCCA TTCTAGATGC
 132551 TTTTTTCTTA ATGACCCAAC AACTGACTCC TTCAGGAGCT GGCATGAGAT
 132601 GAGATTGTGT TGCAGAGATG TATAAAAATT TCAAAGCCCC AAAGGAGATT
 132651 TCACCACAGA TCATTAAGTC CATCTAATTG TCGTCTACT ACCCATTTAG
 132701 ATGGGGACCC TGTATGCTA ACTCCTATCC TGTCTCTTGT GAGTGATACA
 132751 GTC AACACACAC ATGATGATCA CAGCACCAGC TCAGACAGGT GTGTTTAA
 132801 ACAAAGTGT GTTATAAATG TACAGCCTCA GCAGGAAAAA TGTGGGGGCG
 132851 AAGAAACACA CAAATACTTG GCTAGAGTCG GTCACAGGTG AAGATGGGGA
 132901 TGA CTGTGT TTCCGTTTCA TCCAAACATT TTGGCCTGAC TCAGATAATT
 132951 TTTTTTCCAG CATATTCTGT TTGACACAAG GGAAACGGTG CAAATCCATC
 133001 ACCACCATTG TGGAAAGAGC TCCAACTCA TTCTCACGAA TGGTGGATCA
 133051 GTAATACTAC ATGACAAATG GTAGCATTTT TGGGAAACCA TTATATTTGC
 133101 ACCAGTGAGA AGTCAGAATC AGCATTGGGG CTGCAGTCAT GGAACCATGC
 133151 AAGAAACATT CAAAGCATTG GCTAAGCAGG ATTTTTTTGT TTGTTTGACC
 133201 TGGTGTCCAC GAACAGGCTT CAGGGAGCCT GAGAACCTCC TAGACCACTT
 133251 GAAAAATTCT GAATGCACTT TTCTAGGAAA GAGTTCACAG CGTTCATCAA
 133301 ATTTCTCTCA AGCAGCCAAT GACCAGAGAA AGGTTAAAAA TCACTGACAC
 133351 AGTACCGTTT TCTGTGCATC TATATCCTGA ATCCAGGGTG ATGCCGCTGA
 133401 CTTGCTATC TTTCTCCTTT GGTCTTCCTA GAAAAAGCAA GTGAGTCAGA
 133451 CCAAGATCCG GGTCATCTCA ACCATCCTGT TCATCTTGGC CGGCTGCATT
 133501 GTGTTTGTGA CGATCCCTGC TGTCTCTTT AAGTACATCG AGGGCTGGAC
 133551 GGCCTTGGAG TCCATTACT TTGTGGTGGT CACTCTGACC ACGGTGGGCT
 133601 TTGGTGATTT TGTGGCAGGT AAGCACCTG GGCAGGCCAG GCACTGGGGC
 133651 TCTGGCGGGA AAAATAATCT GTTGGCTGTG CTTTTCGCAA TCGATAAAAG
 133701 ATGTTGCGGG AGAAGCAAAT GAAGATGACT CAGTGTCACT ACTGCTGTGA
 133751 AGAGGCTCAT TTCAAATCCC TAGTCCTATG TAATATAAAT ACCATAGGTT
 133801 TTTTTCTGCT ATGAAAAGAA AGCCAACCCCT TTCCTTCTCA GGATGCTTAT
 133851 TTCCCTTATC GTCACACAAA TTATGCAAGA CTAAAGTGAA TTTCTCATTA
 133901 AATCTTGAAC TTCTGAATTG AATTAAACCT CTCTAATCCA ATGATAAAGG
 133951 CTGTGTAGG AAGTGCACA TAGGAACTC AGATGAGATT AGCATAGAAT
 134001 TTGGTCTGCA GTGACCTGCA GGTTCAGCTT CCTGACTCCC AGGTGAGAGC
 134051 CATTGTCTCT GCAAACGTTG TCCTGCACAT GCCAGATAC AAAGCTGAGG
 134101 ACATTTGTGA TTTAGGGGAG CTGAGAACTG CCCAGAGGGA ATATAAGCTC
 134151 ATGGATTATG CAGGAGTGTA TATACAAGCA ATAGCCTTCC TTGTA AAAAT
 134201 AAATGTGGAT GAGCTATGTT TAAGGAAGTG AAAAAAAAT CATCAATTTT
 134251 ATCTAGGGCC AGGGAAATTG CAAATGAAAT GAGATTAGT TTCATATGTG
 134301 CACCAGTTTC CCAAAGTGT GGTAGAAAGG TACGGATAGA AGGAAGAGGC
 134351 CATCCTTCTC TTTTCTAAT AGGATAGTTC TAGATGTTCA GACAAGTGAT
 134401 CAGTTTCTAC TACAAGAAGT GAACACTTGT ATCAAACAAC TCTATCATCT
 134451 GTCACAAGTT TGAATGTCT GGATGGAGTG TGTGTGTGTG TGTGTGTGTG
 134501 TTTCTTTTAC CAGTTCCTGG TGAAGTGGCA GCCTGACCTG AGCCCTAAGC
 134551 AGACTGTTTT TTTTGTGTTT TGTGTTTGTG TTTGTTTGTG TTGAACAGGG
 134601 TCTCCCTCTG TTGCCCAGGC TGGAGTGCAG TGGTGTGATC ATGGCTCACT
 134651 GCAGCCTCGG ACCTCTGGGG CTCAAGTGAT CATCCCACCT CAGCCTCCTG
 134701 AGTAGCTGGG ACTACAGACG TGTGCCACCA TGCCTGGCTA TTTTTTATTT
 134751 TCATTTTTTG TATTTTTCGT AGAGATGGGA TTTAGCCATG TTGCCCAAGC
 134801 TGGTCTTGAT CTGTTGGGCT CATGTGATCG GCCTGCCAAA GTGCTGGGAT
 134851 TACAGGTGTG AGCCACTGCA CCTGGCCAGA CTGTTCTTGT TTGGCGTGTG
 134901 ATCCCAGCAG TGTCTTGATT TCTCCATGGA ATACTGTGCA CATCAGGAGG
 134951 ATGGGTCTCT GTCTCTGGGA GTCTGGCAAA CAGGAAATTC TGGAAGAGAT
 135001 TGCTGAAGGC TCATCAATAG GGGCATGCGT GCCTCCCTGT TAATTTTATA
 135051 ATACAAATAA TGGCAGAGT GGTTTTGTAG CTCTTCCAAT TGGGCAGACA
 135101 AAGACTGAAT TCCACTTGT AGAAATAATA GGGTTTTTTT TCCCCTTCTT
 135151 TTTTATTGGT TAAGGACTAA GAATTGCAAA GTGACTAAAT TTAGTTTTTT
 135201 TTAGCTTTTA ACTAAAAATT GATTTTTTAGT CAGTGTGACT AAAAATCATT
 135251 TACAGAAAGC CTGTAGCCTG GGA CTCTACC CATTTTCCCC TTACGCACAG
 135301 TGCTCAACCA TGGATGTCTA GTTAGTGGCC TCAAGCTCCG AAGAGAGACT
 135351 GTACAGAGAA ACTGAGAAAA GTAAGAGGAA CAGTTATAGA TGTATTCCAG
 135401 TTAATCCCTT GGCATCATCC GTAGCCGGTC CGTGGGAAAA CTCAGTGGTG

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135451 TTTCCAATCT AAGGCAAAACA CATGTAGTGG CAGCTGGAAT TTTGAACTAT
135501 TTCACAAACA TCTTTAAGTA TCCAAAGCAT AACCTGCAGT GGGTGGTGAT
135551 TTAGAGCTCT CTGGGATAGC ACTGGGCTGT CCTGAGGACT GTCTATTATA
135601 AGATACCTGT GACAGACACA GATCTCTAAC CAATGGCTCA GTTCAGTCTG
135651 TTAATCTGAG GCACAAATAG CAGAGGCCTG GGAGTGAGAT TTTTTAAGTG
135701 ATGCTTTTAT TATTTGTTAT CTACCATGGA CTGAGCACTT AGTACAACT
135751 AGTACTTTAC CTTATCTTTA CTTACCTAGT AAGGGCACAA CCTACACAGT
135801 CCCAGGCATC CACAGTTTTA CTGCCCTTGT CAGTGATTAC AGAGCCATAT
135851 TTCCTTTGTC CTGAGGTTTC TGTAGACCAC GGTCTCTTAA AAGTCACAGT
135901 GCTGAATGCA GTTAGGCCAG ACCCCTTCCA AGCTCCAGTT TTCCGAGCTT
135951 ACACAGACCA ATCTGGAGAA TGCATGCCTG AAAAGACTGG AAGTTTATCT
136001 CTATCTTTTG GTAACAGTCT GCGAGTGATA GGAAGGTTG CCCAATCATT
136051 GGAAAACGAT ACATTAACAA GAGTTGATGG TTGCTGTGAT TCGACATAGT
136101 ATGAACTCTA CTAGAAATGT AATCAGATCA TTGATCCTGC AGGATTGATT
136151 GCTGATTTAT TTTGCAGCTG ACTCACTTTA GGACAGCCTT ACAATATTTT
136201 GCAACTCTGT CTGGGAGCAC ACACAGAACT CCGAATCCAG ATAAGCAGCT
136251 CAAAAAGGGA TACTTAGAAG GGTGTTGACT GCCTGCTTCA TTGTTCCCTG
136301 TTCACTAGCG CACCCTAGTG ACCATCTTTG CTGGGTAATA GTGACTTGCA
136351 AAGGTAAATA TTTACTCCCA GATAGCCAC AGGAGAAAGC TACAGATTTT
136401 TCTGGCGTAG CACAGAAACG AAATGAACCT CAAAAACCAC TTACTGGTGC
136451 GGGAACTCAG ATCGTATCCT ACAGCTCTAA TGATGCAGGA GAGAGTTGTC
136501 TGAAAGGAAA AACCAAAAGC AGCTGCACCA AACCAGAGGG GGCTTGGCAC
136551 AGAGAAGTTG GAATTCTAAC GTTAAGAAGT GGCAGCAGCT GTCGAGCCTC
136601 ATGGTCTGCT GCGCTGTGTT GCTGATTGGG TTTGAGCTTG TCGAGAGGAG
136651 CCACAGGTCA CATTTCTTGC CCAGCTGCCT TTGCCGTAAG ACTCAGTGGC
136701 GCTAGATGTG GTTACAACCT TGGTCTGGTG GGAAAGTCTG TAATCACTCA
136751 TCACCTAATA CGATAGTTAC CAATCCATTG CTAGTATCTG TCATCTTAGA
136801 AATGGCCACT GCCTGCTTCC TTAGGCAATA GCGTTTCCCA GAGAGAGATT
136851 GAGGCTGATG TCCGTTATTT CCAGGAGCTT CCTCACTTCT TTAGGACGGT
136901 GGGTTGGGCT TGCACCTGT TTTGCATGGC TGCCTCCAGC AGTGTCTGTA
136951 GGAAGGTTAG AATAAATAGG CTAATTATTC AGAATAAATG ACTGGTCCTT
137001 TCAATGGAAC AGCCAGTCAA TGCAATCAGG CAACTGGCCA ATTTGGTTTG
137051 ATGGATTTT ACTGTAATCC TTATTTATAA AATAAAGGGA TTGGCCTCAA
137101 AGGTCCCTTT TAGTTCAGT TTATGGTGAC TCTAATTACT CAGCCTAACT
137151 GACCCTTTGG AGTAGCACTA TGTAACACC ATTCTCAGT TAGCATTA
137201 TCATATTGCT TTGCATCAA ATCCCAGTAA TGCCATTA
137251 CTTTACACCA TCCACTGTG TCTTAGTAA TGTATGGGTG CTTAAGATGG
137301 AAATGGTTCC AAGAATTCCA AACCATAGGG GGTGGTATGA TTATATTTGA
137351 TTTTATTAA AATAAATTTA GAGAAGTTA AGAAAAACA ATGACAACCA
137401 GGCTGATCT GTTGTCTGT AGTTCAGAGT TATTCATCCT TAACGCTCAG
137451 GTCAAGCATT AGTAGGTCAA GTTGGCCACT GGCCTTTTTT ATTTCTGGTA
137501 TTAAGGTTAG TGGTCAAGAA TCGAGGGAAG TAAAGCCTTA AGTTAGGCTT
137551 TTTTGGGTAA GGGATGGGTA CCCCCCTG CCTCTAACCC CGGTCCACCT
137601 TGTACACAGC AAACCTAACA GCTGAGTGTT AAACAATGAT GGATGACGTC
137651 TTCACTACAT GGAATGGAAT ATGTGTTCTC TGCAAAGACC ATATGCTAGA
137701 TCATGGTTAA AGTAACATTT GGTGTTTTC AGGGGGAAC GCTGGCATCA
137751 ATTATCGGGA GTGGTATAAG CCCCTAGTGT GGTTTTGGAT CCTTGTGGC
137801 CTTGCCCTACT TTGCAGCTGT CCTCAGTATG ATCGGAGATT GGCTACGGGT
137851 TCTGTCCAAA AAGACAAAAG AAGAGGTAGG ACCCTTCCT AACCTATGA
137901 ATGTTCTGGA GAACAGATGA GCTTGTGTCC AGAATTGCCT GTCTCTGTCC
137951 TGTGGGCTGG AGTGTCTCTG GCTCGGTTTT GCAGGGGGAG CGGGGGGCGG
138001 GTCATAGGCT TCCTCATGTT GAATCAGTCC TTCAAAGCTA AGGAGAATAG
138051 AATACAGTTA TTTCTGGATT CTTTTTTTGG CAGGTGAGAA AATATGGTGA
138101 TTCGTTTACC AGCCCATAAA TCCTGGAAAA ACTAGTAAAC AACAGCTGAT
138151 TTTAAAAAAA TGAAAATGAA AATAAATAGG AGAGGTAGAC TATGGCTGAG
138201 TGTGTGTGTG GGGGGGTGCA GCCTGTCCTT CCGTCTCAG GGTCTGTGCA
138251 GAAAGGCAGT TGAACGCCAA GAATCTTCC TGATTAGTA AGAACTGAA
138301 ATCATCGAAC ATTGACCAGC TACGGGGAAG TGAGCCCAAT GGGCCTCTTT
138351 CACTTATCCC CTCTTGGTTG TCACATCCAT AGAGACAAAT ATACATCCCT
138401 GAGGAAGGGC CGTGATGTA ACTTTACATG AAGGGAAGTA AAGGAAGACA
138451 TATGAAGGAA AGATAGATTT TGTGATTAAA AAATAAATAT TCATGTAGCT
138501 CTCTTAGGAA GAGAGAAAA GAAAGGAGGA AGGCCAAGGA AGGAGAAAAA
138551 AAAGAGCTAA AAGAAAGGAA GGGAGATAAG AAAAACCAAA GAAATAGAGG

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138601 GCCAGCCTCT GTTTGCTTCA TTCTGTATAA AAGGCCCCAG GAGAAAGTTG
138651 CTGAATGGAG AGATTTCCCA CATCAGTTTC CTGGGCCCAT ATGCTAATTT
138701 TCCTGTGTTA TATAAGTAAG CCAGGAAAGT AAGCAATGCA ATTTCCAGAC
138751 CGGTTCCCCA GACAGCTAAC TGACCTGCTG AAAATCAGCT ATAACAAAAG
138801 AGAAGGGAAC AACATGAATA TTGACTTTCC TGGATGCACA AATTTGAGTT
138851 CCTCATTTGC AGAGGGAAGC ATGGGACTTA TACTGTCTGC CCTGTTCATT
138901 AAGAGCCAAG AAATTGGGTG CTGATCCTCA GGCAAACTC CACTCTAAGG
138951 AGGCCTGTTC TGTGGGCTTT GGCAGAATAG GCCGTCTTCC TGCACCCTGA
139001 CTGGGGGAAG TGGGTTACCA GGTGCCCTGG AGCATCTTCT TAAACCAGGG
139051 AAAGCCCCAC AGCAGATGAC CATAGCATGG CCCAGATAGG GTGGCCACCC
139101 ATCCCAGTTT TCCCAGGACT GAGGGAGTTC CTAGGACACA GGACTCTGTT
139151 TTAAACTGG GACAGCTCA GGCAAACTGG AACAAGTTGG TCACCCTGCC
139201 AGGATAGAAA ACCAGAAAGG CAGGGAGGGC AGAAGGCCTG CTGAACATCT
139251 GCTGTGCCCA GGACTGAGTG AGGTGCATTT CCTTGTCTCA GGTGAGCTAT
139301 ATATGGTTC TCAAGTGAT GTTGGGGGAA TGAGGCCATG CAATTGATAA
139351 GAGAGAGCTG GAAGCCAGGC CTGTCCAAC CCACATTTTA ACCTCTCCTG
139401 CAGGATGCCG TCCCCCTCTC TTTAAGTCAC CATCTCCAAA TCTGAGGCTT
139451 CTTGGGGTTG CCCACCACGT GTGTCTCCCT GAGCCACCTT ATTTACTAGC
139501 CAATTAGGGA TGGGTGTCCA GGTGGCAGAA GTACTAGGGC AGAAGGTAGC
139551 ATTTGCACCT CCCCCCTGGG CATGTGCTCC GTCACCTCCT GGCCTCCCCG
139601 TGGGGACACC CGAGGCTGT GGGTGTGTTG AGGCCAAGGC AGGGAGGCAT
139651 TTGTGAGCAT ATTGTTGCTC TTCTGTCTCT TGGCCAGGTG GGTGAAATCA
139701 AGGCCCATGC GGCAGAGTGG AAGGCCAATG TCACGGCTGA GTTCCGGGAG
139751 ACACGGCGAA GGCTCAGCGT GGAGATCCAC GATAAGCTGC AGCGGGCGGC
139801 CACCATCCGC AGCATGGAGC GCCGGCGGCT GGGCCTGGAC CAGCGGGCCC
139851 ACTCACTGGA CATGTGTCT CCCGAGAAGC GCTCTGTCTT TGCTGCCCTG
139901 GACACCGGCC GCTTCAAGGC CTCATCCCAG GAGAGCATCA ACAACCGGCC
139951 CAACAACCTG CGCCTGAAGG GGCCGGAGCA GCTGAACAAG CATGGGCAGG
140001 GTGCGTCCGA GGACAACATC ATCAACAAGT TCGGGTCCAC CTCCAGACTC
140051 ACCAAGAGGA AAAACAAGGA CCTCAAAAAG ACCTTGCCCG AGGACGTTCA
140101 GAAAATCTAC AAGACCTTCC GGAATTACTC CCTGGACGAG GAGAAGAAAG
140151 AGGAGGAGAC GGAAAAGATG TGTAACCTAG ACAACTCCAG CACAGCCATG
140201 CTGACGACT GTATCCAGCA GCACGCTGAG TTGGAGAACG GAATGATACC
140251 CACGGACACC AAAGACCGGG AGCCGGAGAA CAACTCATTA CTTGAAGACA
140301 GAAACTAAAT GTGAAGGACA TTGGTCTTGG ACTGAGCGTT GTGTGTGTGT
140351 GTGTGTGTGT GTTTTTAATA TTCACACTGA GACATGTGCC TTAACAGAC
140401 TTTTTAGTCC AAAATTACAT AGCATTGAAG AATATATTTT ACTGTGCCAT
140451 AAACAACCTGA AAGCTTGCTC TGCCAAAAGG AATCAGAGAA CAAGAACTTC
140501 ATTTTCAGATA GCAAACGCAG GACACACCAA GAGTGTCCGT GCACGTAGCC
140551 GGTTCTGGCC GTACATGTTA AGGGCATTTT AGTGGCAGTG CTGTACCCCT
140601 GGGCAGTGCT ACCTGGGCAC ACACGTAGAC AAGGGCAGCT ATTCCTTAGA
140651 CCAGCTCTCT GAAAGAAACA GGTGTGTCTT TTTAGTGGAG TCGTAGTAAT
140701 ATGTGTCAC ACAGAAAGGG ACCTGATTGG GTGGGAGCTG GTTATGTGTA
140751 ACTAGCGTTG GAGTTGACAT TTTGGCATGT GCTCTGAGCT TGAATTTTGA
140801 TACCAACCAT TCAGTGCATC ATACCTAGTC TTTCTATGCT CCAAATGAAT
140851 GTCTGTGGGG ACCTGAGAGC ACCTGGAATT TGTGGAAGC AGATCAGAGC
140901 ACACGTACGA AAAGGTGCAA TTGCTTTTCT CATGACAAAA GAAAAAAAT
140951 AATCACAAAC ACATCACACT GTGGATATCA CCTTAACCAA TGACAGAAGC
141001 CTGCTGAGTT TGGTCTTTCT CACAGGGGTA GGTAGTCCAC ATGAACTGGC
141051 GAGCAGTGGT GAAAACATGA CATCAACTGC TGCGTGGTTA AAGGCCAATC
141101 ATGCATTTTC CTCAGTGGGT GCAATGGTGA CAATAAACTG ATTTGGAAAT
141151 GTCCATGTAC TTTGGTTATA ACTTGTTTTG ATAAGAGGGG TAGAAATACC
141201 AAAACAATTG CCTTGCATGA TGCCAGTGGC TTGCTGTCT GTCTAGCTGA
141251 TCCTACATTT TTACAAAAGT AGACATCCTG CATTTCTGAG ACACACTGAG
141301 GAGGACCATG GCATCTTTCC ATCTCAGGGC TTTTGTGCC TTGGGTGTCT
141351 TAGGGTAGAC ATAGTGATAA GATCCAATCT CGTATCTCC AAACAAAAG
141401 AAAATGTACC CCTTGTACAG TAAGCTTGAA ATGTTTTTAT TGCTTGACGC
141451 GTAAGTGCCA TTAATTCAT TTAACAATGA TACTTAGAAA TATTTAAAT
141501 ATTTTCATTT ACTTTTATGT TTGGGCATTC CTTTATTCTG AAAAAGTCAC
141551 CACTGTCTCT TGCTTGTTC TACATCTCAC ATCGTTACT CACTAAAAT
141601 GGAACACCTT AGACTGATTG TTCCAGGCA AACGATAAGC TAACACATCA
141651 TAATTATGAT TGGTCTGTGA GGCTAGAACA TCCCGCAGAG GAAAGTCGGG
141701 GAATGGCTAG TCATAGGTTG CATGATGATT TTAAATGGGT TTGTATCAGA

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141751 AAGGGGAAAA TACATACTCC TGTGTATGCC TCAGTCTTTA TCATAATTGG
 141801 CTGGTTCACA GCTAGCTCTT TGGGCCACAC GTGAAAGCAT TTGGACCTGG
 141851 CAACACCAGG CAGTTGCTGG TTATGGGTGT TCTAGGCTCA CTGCTACCTT
 141901 TTACAGAGTT CACGGGATTT TACGTAACTA ACCCGCAGTG TGGATTTACC
 141951 AAAAGATCAC AGCACTAGCG GAGACTTCCA GAAACTGTCT CATGCTTTCT
 142001 GACCTCCAGG GAAAGTTGTA CCCACGACAT CCTCAACCAC TGGTACCATG
 142051 GAAGACCTGT CCCTGCCCAT TTCTCAAAAA TGCACAGCTC TTCCTGCCT
 142101 GGAGCACATG AAGTCCCATC TCCCTGTCCC CAGACCTTTA GGCTCTGTTG
 142151 AAGTTCTGGC ATTGCTTATG AGACCCTTCC TGTCCAAGGA AGGTCTAAGT
 142201 CAACTCCTCC ATTGGACTGG AGATGAGGCT CACTGGTGAC ATCCTGTGTC
 142251 GACTCAGTAA TAAATAGTCA CTTGGGAGGC GATGTTTATG CAGGTGTGGA
 142301 TGTTGAGTTT TACTATGGGA ATCATTCCAG CCTGACAAAA TGTGTTTTAA
 142351 GGAATAGGTA GATAACTGGG ACTTCCTCTG TTATTCTAAC AAGTCGAAGC
 142401 TTCCTAATTA AACTGTCCAT GGATCTCACT TATTTGGTTT CCACTCTGTG
 142451 TTATCTGGTA CGTTCCTTGT AGCAGTGTGT TAAATTTCCA GGCCCTACGG
 142501 CCAAATCTGG CAGAGGCTTC CCTCTCATTT ATCCAGTGCC TTCTGTGGGC
 142551 CAGGCACAGG ATTAGGCACT TTATGAACGT CAGCTCATTG AAACCTCACG
 142601 ACACTATGTG GGAAGTATTT GCAAACCCAT TATATACACA AGGACACAGA
 142651 GGCTCAGGGA AGCTATGTTA TTTATCCAAT GGCACACAGC AAGAAAGTGG
 142701 TAGAGCTGGT ATTCAAAGTC TGACCAAAGT CTGCTTTCAA CTTCACTACA
 142751 GTGTCTGTGT CATGCATCCT TGTGATTGTG TGTGTTGTG TGTATGTGTG
 142801 TCTTTCTAGC TTCATGGACA CAGCTTACAG ATGTGGGGAG CAGATATGGT
 142851 GGAATCTCCA CCACCAAGAG GGCACAAGGT CTTTGTGTAA ACATGGCTCA
 142901 AAGGGTTGCC CCTGCAGACA CCTACTGTAC ATTTATTTGG TTTTGGAAAT
 142951 TTTGTATGTG GCACCCTTTA AAAAATGCCC TTTGAAAGCA CTCTTTTGCA
 143001 CTTTACTTGC TAACTTTGTA GAAACTCTGC ATACAGCAGG AATAAAATAG
 143051 TTCAAAGCAC TAAGCTGCAT ACTCTACCAA ATGGAACAGG TGCATGTGTT
 143101 GGTATGTGCA TAGATGCTTC CCCAAATGAG TCAAATCAGT CACACAGAGG
 143151 GATCAAACAT AACCTTGGGC TGGGGGTGGG AAAATTTTCT ACATAACCCA
 143201 TTCCCTGAGA CATTGGCCA AGAATGTGAT GAACAAAATC AAAGAAGATC
 143251 CTCTATGGTG ATTGATCGAT TAAATATGTG TGCAAAGTGT TTAGAAACCT
 143301 ATGAAA

FEATURES:

Start: 3000
 Exon: 3000-3051
 Intron: 3052-62251
 Exon: 62252-62601
 Intron: 62602-84982
 Exon: 84983-85100
 Intron: 85101-98275
 Exon: 98276-98436
 Intron: 98437-133431
 Exon: 133432-133618
 Intron: 133619-137732
 Exon: 137733-137875
 Intron: 137876-139687
 Exon: 139688-140305
 Stop: 140306

CHROMOSOME MAP POSITION:

Bac accession #: AC026597
 Chromosome: 18

ALLELIC VARIANTS (SNPs):

DNA				Protein		
Position	Major	Minor	Domain	Position	Major	Minor
981	G	C	Beyond ORF(5')			
1012	C	T	Beyond ORF(5')			
1990	T	G	Beyond ORF(5')			
3432	C	T	Intron			
4658	T	C	Intron			

4772	G	A	Intron
7738	A	C	Intron
9118	T	A	Intron
9192	A	G	Intron
9222	G	A	Intron
9734	G	T	Intron
9795	A	G	Intron
9853	A	C	Intron
10397	G	A	Intron
11198	G	T	Intron
11470	G	T	Intron
11534	G	C	Intron
11540	T	G	Intron
11557	C	G	Intron
11708	A	C	Intron
11953	C	T	Intron
11967	T	C	Intron
12172	A	C	Intron
12188	G	A	Intron
13472	-	T	Intron
13781	A	C	Intron
14031	A	G	Intron
14110	T	C	Intron
14248	A	G T	Intron
14676	T	C A	Intron
14981	C	T	Intron
16365	A	G	Intron
16827	G	A	Intron
17599	A	T	Intron
18093	A	G	Intron
18226	G	C	Intron
18467	-	T G	Intron
18511	-	A T	Intron
19107	G	A	Intron
19223	A	G	Intron
20102	T	C	Intron
21946	G	T	Intron
22240	T	C	Intron
22679	A	G	Intron
23178	T	C G	Intron
23370	T	G	Intron
23583	A	G	Intron
24159	G	A	Intron
24307	C	T	Intron
24493	T	C	Intron
24822	C	T	Intron
24946	-	A	Intron
24947	-	A T	Intron
24959	T	C	Intron
25321	T	G	Intron
27280	C	T	Intron
28062	G	A	Intron
29033	G	C	Intron
29302	C	-	Intron
31093	T	C	Intron
31454	G	A	Intron
31834	A	G	Intron
31936	C	T	Intron
31947	A	T	Intron
31980	A	G	Intron
32156	T	G	Intron
32161	A	G	Intron
32436	A	G	Intron

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32490	T	C	Intron
32526	G	A	Intron
32893	A	G	Intron
32900	G	T	Intron
33087	A	G	Intron
33474	C	G	Intron
33474	C	T G	Intron
33474	C	T G	Intron
33741	C	G	Intron
34043	G	A	Intron
34053	C	T	Intron
34297	A	C	Intron
37209	T	C G	Intron
37475	G	T	Intron
38476	A	G	Intron
38486	C	T	Intron
38576	A	G	Intron
38810	A	G	Intron
38825	A	C	Intron
39317	C	T	Intron
40519	A	G	Intron
41468	A	T G	Intron
41468	A	C G	Intron
41565	A	C	Intron
41625	A	T	Intron
41921	G	C T A	Intron
42152	C	A	Intron
42498	G	T	Intron
42715	T	G A C	Intron
42776	T	C A	Intron
43320	G	T C	Intron
43341	A	T	Intron
43424	A	G T	Intron
43509	A	G T	Intron
44584	C	T	Intron
46250	A	C T G	Intron
46287	C	T	Intron
46566	A	C T G	Intron
46653	G	A	Intron
47153	T	A	Intron
47171	C	T	Intron
47216	A	T	Intron
47484	T	C	Intron
47668	G	A	Intron
47698	C	T	Intron
48029	A	T	Intron
49334	A	G	Intron
49680	C	G	Intron
50056	A	G	Intron
51020	A	T G C	Intron
53750	G	T C	Intron
53753	A	T C G	Intron
53799	C	A T	Intron
53917	C	T G	Intron
54056	C	T	Intron
54402	G	A	Intron
54493	G	A T	Intron
54749	T	C	Intron
55396	-	C	Intron
55397	-	C	Intron
55703	A	C	Intron
55783	G	A	Intron
55806	A	C	Intron

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57433	G	T	Intron
57699	T	A	Intron
60173	C	G A T	Intron
62216	C	A	Intron
62830	G	C	Intron
63395	G	A	Intron
64019	T	-	Intron
64030	T	-	Intron
64104	C	A G T	Intron
64166	G	T	Intron
64408	A	G	Intron
64786	C	T	Intron
65120	A	G C	Intron
65703	C	T	Intron
66930	C	G	Intron
66951	T	G	Intron
68094	G	A	Intron
68124	A	G	Intron
68787	A	G	Intron
69668	C	A	Intron
69701	A	C	Intron
69773	C	T	Intron
70257	-	T	Intron
70261	-	T	Intron
70268	-	T	Intron
70941	G	A T	Intron
71359	G	T	Intron
72550	C	T	Intron
75313	T	A	Intron
75541	G	T	Intron
75957	T	G	Intron
76415	A	C	Intron
77872	T	A	Intron
78058	A	C	Intron
79799	A	G	Intron
80598	G	A	Intron
82609	A	G T	Intron
83645	A	G	Intron
83756	C	T A	Intron
84687	A	C	Intron
84761	C	T	Intron
84911	-	T	Intron
84921	-	T	Intron
85786	C	T	Intron
85903	T	-	Intron
85906	T	-	Intron
85908	T	-	Intron
85913	T	-	Intron
85932	A	-	Intron
86085	C	A	Intron
86585	T	-	Intron
86596	T	-	Intron
86601	T	A	Intron
89478	-	T	Intron
89488	-	T	Intron
91631	A	G	Intron
91898	G	C	Intron
93506	T	C	Intron
94409	T	C	Intron
94689	T	A	Intron
94856	G	A	Intron
95303	A	G	Intron
95373	G	A	Intron

FIGURE 3, page 49 of 107

95657 A T Intron
 96312 - A Intron
 96315 - A Intron
 96329 - T A Intron
 96370 C T Intron
 96372 C T Intron
 96439 T C Intron
 96468 G A Intron
 96501 A G Intron
 97217 A G Intron
 97449 A G Intron
 98167 A G Intron
 98430 G C Exon
 98846 T C A Intron
 99326 C A Intron
 99514 C T Intron
 99680 G A Intron
 99879 T C Intron
 99971 A G Intron
 100895 G A Intron
 100927 G C Intron
 102805 G A Intron
 103462 G T Intron
 103811 G A T Intron
 105461 G C Intron
 105981 A G Intron
 106495 G T Intron
 107077 G A Intron
 107431 T G Intron
 107671 A G Intron
 108826 C T Intron
 111310 T A Intron
 112035 T - Intron
 112038 T - A Intron
 112066 G T Intron
 114098 G A Intron
 114293 A - Intron
 114413 - C T Intron
 114414 - C Intron
 114692 C T Intron
 115696 A T Intron
 116153 A C Intron
 116213 G A Intron
 116507 G A Intron
 116796 G T Intron
 117142 T A Intron
 118270 G C A Intron
 118495 C T Intron
 119314 A T Intron
 119740 T C Intron
 119899 G A Intron
 119990 G A Intron
 120169 A G Intron
 120519 C T Intron
 120812 A G Intron
 121053 T C Intron
 121246 G A Intron
 121475 C T Intron
 121715 T A Intron
 122390 C A Intron
 122606 C T Intron
 122767 T C Intron
 122957 C A Intron

225 V V

122963	G	A	Intron			
124458	C	G	Intron			
125449	G	A	Intron			
126753	G	A	Intron			
126957	-	T G	Intron			
126962	A	-	Intron			
128567	T	- C	Intron			
128567	T	- C	Intron			
128599	T	G	Intron			
128843	G	A T	Intron			
130388	T	C	Intron			
131191	G	C	Intron			
132702	C	T	Intron			
133422	G	C	Intron			
133447	C	A	Exon	233	Q	K
133956	T	C	Intron			
134132	C	T	Intron			
136253	A	T	Intron			
137206	G	T A	Intron			
137313	C	A G	Intron			
137335	G	A	Intron			
137951	T	C	Intron			
138206	G	C	Intron			
138207	T	G	Intron			
138210	-	G	Intron			
138805	G	C	Intron			
140339	-	T	Beyond ORF (3')			
140340	-	G T	Beyond ORF (3')			
140360	-	T	Beyond ORF (3')			
140366	T	-	Beyond ORF (3')			
141183	A	G	Beyond ORF (3')			
141545	A	T	Beyond ORF (3')			
142316	C	T	Beyond ORF (3')			
142436	T	C G	Beyond ORF (3')			
142719	G	T	Beyond ORF (3')			
142779	T	C	Beyond ORF (3')			
142931	A	C	Beyond ORF (3')			

Context:

DNA

Position

981

TTTGTTTGATTTCATGTCTTAGCCATCCTCCCAGTCCTAGTAGAGAGAGGCAAAGTGTG
 GTTACAGAGTCCAGGGAAGATGGTTCTGAAGCACCCGGAACCTGCCTAAAGGGCTGAAG
 AGTCAGAGTAGCACCATCAGATTGGTACCAGTTTTCCTGAACGGGGTTTCAGAGAATT
 CAGGGCTCCAGCCTGGGGTGCCTGTGACAGCCCAGTGACAAAGCACTCACCTTTCCACA
 GACCACAGCGGACCTCTGTAGGTCTTGCTCTTGGACTCAGAAACCTTGATGTGATAGTGA
 [G, C]
 GGATGGATGGTGAGAAAGATGCTGCTGACACAGGGCTCCCCAGAAGCCTCAAGGTGCCGT
 AGAGTAGCATGCAACTTAGAGATCAGCTGCTAGTGTGGGATTTTAGGACCCAGCTGGCA
 GGCATAGGAATGAGCTGGGCAATTTCTATGCGTAAGTAAAGGCAACAACAATCTAACAGG
 ACCTTATGGCACTAGATAGTAAGCCCCATGAAGGCAAGATCTCTGTCTTGTCTCTGCCA
 TATGGCCAGCACATAGCACAGTGTGGCACTTGAAGGGGTTCAATATATATGTTGAATG

1012

CCAGTCCTAGTAGAGAGAGGCAAAGTGTGGTTACAGAGTCCAGGGAAGATGGTTCTGAAG
 CACCCGGAACCTGCCTAAAGGGCTGAAGAGTCAGAGTAGCACCATCAGATTGGTACCAG
 TTTTGCCTGAACGGGGTTTCAGAGAATTTCAGGGCTCCAGCCTGGGGTGCCTGTGACAGC
 CCAGTGACAAAGCACTCACCTTTCCACAGACCACAGCGGACCTCTGTAGGTCTTGCTCT
 TGGACTCAGAAACCTTGATGTGATAGTGAGGGATGGATGGTGAGAAAGATGCTGCTGACA
 [C, T]
 AGGGCTCCCCAGAAGCCTCAAGGTGCCGTAGAGTAGCATGCAACTTAGAGATCAGCTGCT
 AGTGTGGGATTTTAGGACCCAGCTGGCAGGCATAGGAATGAGCTGGGCAATTTCTATGC
 GTAAGTAAAGGCAACAACAATCTAACAGGACCTTATGGCACTAGATAGTAAGCCCCATGA

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AGGCAAGATCTCTGTCTTGTCTCTGCCATATGGCCAGCACATAGCACAGTGATGGCACT
TGGAAGGGGTTCAATATATATGTTGAATGAACAACAAATTTTAGTAACCTTATCTGGAAG

1990 CGCTTTCTCCGGGGCCCCCGTGCCTCTCTCAAGCCTCCTTTCCAGCCAACGACCAGCG
GCCCCAGTCCGGCTGCAGGTAGCTGGGGAAGGGACCAAGCTGTGCCTTGGGAGCGAGCTT
CCCCGGGCGGGGAGAGCGCAGCAGATGCGGAGCGGTCCCAGAACAAAGGCTCATGGCTG
GCACGGGCCTCCTTGGAGTGCGGCGGGGACGTGGGTTCGGGACTCAGGCGAGAGAGCCAG
ACGCGGGAGGAAAAAAATGAAGTGAGAAAAGAGAAGGAGGGAGAGCTCAGGGTGAGAGC
[T, G]
GTGAGAAGAGGTGACCCGGAGGCCGAGGTCTGCGGCGGAGCCGAGCGGCCCTTCCTCCG
CCTCCTGCAGCGCCTTCCAGGCAACCAAGCGTGTCTCCGGCTGCAACTCCAGCAAGCGCG
CCGCTGCCGCCTCCACGCCCCGCGCCGCGCCGAGCCAGTAAGTAGCGGCGCGCCCA
CCGCTCGTTCCCGCCCCCTCCGCGGCTTCCCCGCCACCGCCACCGCTCCCGCCGCCCC
GCGGGCAAGTCCGCGACCGCTCCCGCTGCCCCGAGCCGGGTGCCGGGGGCTCAGCGCGC

3432 TGCTTCTGGCAGCGTGTGTCTTGAGGCTGGGAAATGCGCCTGGGAACTGCAGCGCGGGTG
GGAGGAGGGCGGAGGCAGCGTGGGTTCGGAACCCAGATAGTGCCTGTCATTACCACATAA
TCATTGTCCCTCCTAGATTGTCTCCAGATCTATTTAGATAGACCAAGCCGACTGTTTGGT
TTGAAATTGCAAGTGTGGTATTTGCTTTTGACTTTGAGTGTGCGAGTGTGTGTGTGTGT
GTGTGTGTGTCTCTTTGTTTCTGGTGATCTTTGTCTCTCTGCGAGATGGGTGGGGTGCT
[C, T]
CCCCCTGGACCTGGAGCTGCGCCGCATGCCCGGGTGTCTCAGTGGGAAAGGTTTCCTGG
CAGCAAGTGGGGCTCGAGTTGCAGCAGCCGTCCCTAGGGGTGGGCCGTTCTCGCAGGGCA
TGCAATAATGGAGCCACAGGGCCTCCTGAGTCTTCGTTCAATCTTATTACCAAACTT
AGCAGCTAGTTAGGCTCAGGTGAGTAGAAGCAGGAGGAGGGGTGGTTTGTGAGAAGGG
TGGGGCTGGCAAGGCATAGGGGAGGGGCACGAAGTGTGCCCGCCAAGCAATGGTGTGGT

4658 AGTTTACAGTGAGGGAGACAGACCTAAATCAATTCCATGGAGGAATGCATAATTCAAAGT
TTATGTATGCTCCAGGGAGAGCATCAGAGGTTTAAAGAAAGTGTCTGATAGAAGAGATTGA
CAAGGACCAGAGAAAGGCTTCCCTGAGGACATGACACTTGGACTTAGGCCTGGAGGATGTA
TAGGAGTTAATTGTCTAAGGAGGAGGGGAATTGTTGCAGAAGAGGGAACAGCAAGTGCAA
AGGGCCTGAGGCAGAAGAGGTATGTGTATATGATGAACTGAAAGGAGGTTCCCATGGCTA
[T, C]
GGCAGAGTGAGTGAAGAGGTATTGCCTTTTTTAAACACCCAGGCTGTTATACTGTAAATA
CAGCACAACCTTTCATTTTGTCTCTATTTGAAACCTCTGGAAATACGGAAGTGTGCCTT
GGCTTTCTTTTGGGAAATCCCTGAAAAATGTATTTATCCCTAGCAGAGAGCAAGAGGGCT
TGTGTTTTGAGATATGACTGGGGGATCCACAGGCGAGACGCCCCCTCCAAGCCCTGTGT
TGTGAGGTTGGGGTAGCATTTGTGGGGTTGGAAGAGTATAGTATTTATCTAAAGCCAATG

4772 GATTGACAAGGACCAGAGAAGGCTTCCCTGAGGACATGACACTTGGACTTAGGCCTGGAG
GATGTATAGGAGTTAATTGTCTAAGGAGGAGGGGAATTGTTGCAGAAGAGGGAACAGCAA
GTGCAAAGGGCCTGAGGCAGAAGAGGTATGTGTATATGATGAACTGAAAGGAGGTTCCCA
TGGCTACGGCAGAGTGAGTGAAGAGGTATTGCCTTTTTTAAACACCCAGGCTGTTTACT
GTAAATACAGCACAAACCTTTCATTTTGTCTCTATTTGAAACCTCTGGAAATACGGAAGT
[G, A]
TGCCTTGGCTTTCTTTTGGGAAATCCCTGAAAAATGTATTTATCCCTAGCAGAGAGCAAG
AGGGCTTGTGTTTGTGAGATATGACTGGGGGATCCACAGGCGAGACGCCCCCTCCAAGCC
CTGTGTTGTTGGAGGTGGGGTAGCATTGTGGGGTTGGAAGAGTATAGTATTTATCTAAAG
CCAATGAAGAGTTTCAAGACGAGGAGTGACATGATTGAGCTAAGTTTCAAACAAGTGC
TGTGTGGCTCTTGTGGATGTAGGGGACCAAGATACATGGTAGCATGGGCCAGGGTGGTTG

7738 TTCTCTGTCTTGTATTATTGCCATAACCCAGTGCCTTGAAAGTGCCTGGCACTCAATAA
CCCTTTGCTGAATGAATGGAAGGTTGGCAGGATGGACTGGAGAGGACTGAAGGCTTTATG
CCTCATGGAAATTGCAGGACGCCTCTCAGCTATAAATGGCAAAGTACAAATAAGGAGAAA
GGAAGAATATCCCCAAATAGTGGCATATCAGAAAGGACGCTGATATCCCCTTCCCTTGC
AAGCTCCAGCTCGCTCTAAACCTCCAGTGCGCTGTTTTCCTTCTTTCTCGTCTTTGACC
[A, C]
GAAGTAAGAAGGCTGAATAGAAGTGCAGTGAGGGTGGATGGGTGGACTGATCTAGCCTGC
TGAAGATATGGTCAGTGTCCAATAAATAATTTGGCTCATATTAGCTATTGGAGTGTGGCT
ATTTTATAGGCACTTAATCCACTTAAGAAAGAAGCAAAGCTCTAGGAGTGGAGGTGGATT
TTTTTTTAAATGTACACTTTTAGTGACACTTTAATGCAAAATCTGGAGAAGCCCAT
CCTTATGTGCATAGCACCTTTCAGTTTACAGAACACTTTTTAGGAATGATCTCATTGTGA

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9118 ACATCTGTACTTTGGCTCCATATGAACCCACCTTAAATCTGATGCATTTAAAAATATA
ATATAGTCTTTCCCTCATTAGGAACTTCAACCACAACTGAGATATGGTGTGAAGTATA
TTTAATATAGGCACAGTGAGCTAGTGATTTCCCTTTTGACTTTTAGTCTACAGGAAATTAG
AGGAAGAGTTTAAATGATAAAATGGAAAGAAGCCATTCTACTGATAGCCAGTTAGGAAGTT
TCAGTTTGGACAGCTCCCTTGGCTGATGCAGAAAGGTGGATAAAAAATGACAATCTTTTTC
[T, A]
GTACTCTGATTCTTATAAAGGGCACCTACTGGATGATCCAGATGAGGTTAGAGTGAGTTA
GGGGCTTAGCTCTACATGGCATGTTTACAGAATCTACCTAACCGTGGCACTAGGAGTGTG
GTCACCTGTGTGGTCCACCCACCTGGGTGATTTCTCTCCATAAGAATCATGGAGGTCAA
AGGGACCTTCCACTTCTGGGTCTGGTCTAGGGGTACTCTCAGCGGAGACTTTACAGTT
TATCTATGTCTGGCTCATTACCATCACCTACAATGGGGAAATAAAGACCTCATATTTACT

9192 CTCATTAGGAACTTCAACCACAACTGAGATATGGTGTGAAGTATATTTAATATAGGCAC
AGTGAGCTAGTGATTTCCCTTTTGACTTTTAGTCTACAGGAAATTAGAGGAAGAGTTTAAAT
GATAAAATGGAAAGAAGCCATTCTACTGATAGCCAGTTAGGAAGTTTTCAGTTTGGACAGC
TCCCTTGGCTGATGCAGAAAGGTGGATAAAAAATGACAATCTTTTCTGTACTCTGATTCT
TATAAAGGGCACCTACTGGATGATCCAGATGAGGTTAGAGTGAGTTAGGGGCTTAGCTCT
[A, G]
CATGGCATGTTTACAGAATCTACCTAACCGTGGCACTAGGAGTGTGGTCAACCTGTGTGGT
TCCACCCACCTGGGTGATTTCTCTCCATAAGAATCATGGAGGTCAAAGGGACCTTCCACT
TCTGGGGTCTGGTCTAGGGGTACTCTCAGCGGAGACTTTACAGTTTATCTATGTCTGGC
TCATTACCATCACCTACAATGGGGAAATAAAGACCTCATATTTACTTGCTAGAACATCTA
TTTGTCAATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTCTCCCTGTGAGTGTCTAGGACT

9222 TATGGTGTGAAGTATATTTAATATAGGCACAGTGAGCTAGTGATTTCCCTTTTGACTTTTA
GTCTACAGGAAATTAGAGGAAGAGTTTAAATGATAAAATGGAAAGAAGCCATTCTACTGAT
AGCCAGTTAGGAAGTTTTCAGTTTGGACAGCTCCCTTGGCTGATGCAGAAAGGTGGATAAA
AATGACAATCTTTTCTGTACTCTGATTCTTATAAAGGGCACCTACTGGATGATCCAGAT
GAGTTTAGAGTGAGTTAGGGGCTTAGCTCTACATGGCATGTTTACAGAATCTACCTAACCC
[G, A]
TGGCACTAGGAGTGTGGTCAACCTGTGTGGTCCACCCACCTGGGTGATTTCTCTCCATAA
GAATCATGGAGGTCAAAGGGACCTTCCACTTCTGGGGTCTGGTCTAGGGGTACTCTCAG
CGGAGACTTTACAGTTTATCTATGTCTGGCTCATTACCATCACCTACAATGGGGAAATAA
AGACCTCATATTTACTTGCTAGAACATCTATTTGTCAATTTGCAGCCACAGTTTAAAGAGTT
TTTTTTTTTCTCCCTGTGAGTGTCTAGGACTGAGTACTCTGAATTGAAAATGAAACCTGAC

9734 TTGTCAATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTTCTCCCTGTGAGTGTCTAGGACTG
AGTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAG
GGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCTT
TTTCCTTTGCCATTTCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGG
GATGAGGCTGGGAGATGGATGGGATTTTTCAGGAGATTTTAGGTTTTGTATTACCAATAACT
[G, T]
CTAGTCTCATCACTTACCCTTTCCATGGAAGTAACCTTTGAAGCAGAGTGGAATGGTGGGG
AAACAAGATTAGAAAGGAAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAG
GGAACCTTTTCTTCACTTCTCCCGTCTTCTTTTCTTCACTTCCCTTGTTCCTCCCCACC
GCCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTCT
CTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAAG

9795 GTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAGG
GAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCTT
TTCCTTTGCCATTTCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGGG
ATGAGGCTGGGAGATGGATGGGATTTTTCAGGAGATTTTAGGTTTTGTATTACCAATAACTG
CTAGTCTCATCACTTACCCTTTCCATGGAAGTAACCTTTGAAGCAGAGTGGAATGGTGGGG
[A, G]
AACAAAGATTAGAAAGGAAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAGG
GAACCTTTTCTTCACTTCTCCCGTCTTCTTTTCTTCACTTCCCTTGTTCCTCCCCACCG
CCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTCC
TTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAAGA
GTTGCTTGAATAGAAAATGAAAATTTGGTGGGTGATGGAGAGCCTGGAAGTCACGGTAA

9853 GGGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCT
TTTTCTTTGCCATTTCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGG
GGATGAGGCTGGGAGATGGATGGGATTTTTCAGGAGATTTTAGGTTTTGTATTACCAATAAC

FIGURE 3, page 53 of 107

TGCTAGTCTCATCACTTACCCTTTCCATGGAAGTAACTTTGAAGCAGAGTGGAATGGTGG
GGAAACAAGATTAGAAAGGAAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCAC
[A, C]

GGGAACTTTTCCCTTCATTCTCCCGTCTTTCTTTCTTCATTCCCTTGTTCCCTCCCCAC
CGCCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTCAGAAAGGGT
CCTTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTACAGTTTAAAAA
GAGTTGCTTGAATAGAAAATGAAAATTTGGTCGGGTGATGGAGAGCCTGGAAGTCACGGT
AACCTTTGCAGACGCCTAAAACACCAATATTCATAATTTTGACATGCAAGCTAGCAACAA

10397 CTTTGCAGACGCCTAAAACACCAATATTCATAATTTTGACATGCAAGCTAGCAACAATTT
TACTACCAAGAAAATGAGTTTCTTATGTGCAAGCAGAACTCGAGATCCCCATAAATAATCA
CACACCAAATATTTAGCATGATAAAGATAAATAGTATAGCTTACTAAATTTAATGTGATA
TGAGCCTGACAGGCAGAATAGAGATGCTTGATATTAGGTGTGATAAAAGGTTTGACATCC
AACATTCACTTACTTCGTCTCTGAGACAAAAGTCAGGCACCAAGTGTTTAAGAAAATTT
[G, A]

ATGGGAGGAAAAGCTTAGAGATGAATAAAGTCTATTTATTAATTTATATTTTCCCTCTGAG
AACTGGGGAGTGTGTGTACCCATGTTAACTGTGGACTAACCTGGGCCAGCTCCTGGATTTC
TACTGGCTAAGAATGTTGCTTTAGGCCAAAGGAATTTATCCCTCATGGTGGAATTTGAGG
CCATATGGGAGGTGATTATGATAGATCTGTTTCGGCTCTACATTCTTACAATAACCTGA
AAGGAGATTAAATACATGTTATAGTCATTTAACCTAGACTCCAGGCAAAATGTCACCCTC

11198 TCTTCATCTGCAAGATAGGGATAATTACAGCCATTACTTCTTTGGTTTGTATGTGGATT
ACATAAAGTGATACATGCAAGCTCTTAGAAGAATGCCGATCATCATGAAGGCTCCATG
AGTGGTACCTGCCTTGTGCTGTTCTCACAGTTGCAGAGGCAGCCTGTGAAGTCAGGGTA
GCCTCCAGCTCAGCCTCTTGGAAGCATCTGGTTCAGTGTCTGGATCATCCAGGAAGTGGT
CCATAGCAGAGCACAAACCTCCTGATACTCTGGAAGACTCTTAGTATTCCTTAGTTCAGAT
[G, T]

TAAACAACCTAGGCTGTCTGGTTAACTCAGAGAAAAGACCAGTGAAAGAACATGGCTTG
GAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGTTG
ATTTCCGGCTGCTTTAATAAAAATCCATAAACTAGATAGATTATAGACAACAGAAAATTTAT
TTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCAGTGGTAGATTTGGCATCTG
GTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTGCTGTGCTTACACGGTAGA

11470 GAAGACTCTTAGTATTCTTAGTTCAGATGTAAACAACCTAGGCTGTCTGGTTAACTCAG
AGAAAAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTA
CCCATTTTATTAGCAGTGTATCATAGTTGATTTCGGCTGCTTTAATAAAAATCCATAAAC
TAGATAGATTATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAA
GATCAAGGCAGTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGT
[G, T]

CCTTCTTGCTGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGA
TAACTGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGG
CCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGG
ACACATTACAGCCATAACACTGTGTGAACCTGGCCAGTCACCTAACCTTTCTCATGACATT
AGTTTTCTTTTGGGTAAAATAAAGATCACATAACAACCACTTCACAGTTGCTGAGATGA

11534 AAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCA
TTTTATTAGCAGTGTATCATAGTTGATTTCGGCTGCTTTAATAAAAATCCATAAACTAGA
TAGATTATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATC
AAGGCAGTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCT
TCTTGCTGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAA
[G, C]

TGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCC
ATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGGACAC
ATTAGACCATTAACACTGTGTGAACCTGGCCAAGTCACCTAACCTTTCTTAGCATTAGTT
TTCTTTTGGGTAAAATAAAGATCACATAACAACCACTTCACAGTTGCTGAGATGATCAA
ATGAGACAAATGTGAATAAATTCATAAACTGTTAAATTCAGACCAACATTTCCCAAAA

11540 AGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTAT
TAGCAGTGTATCATAGTTGATTTCGGCTGCTTTAATAAAAATCCATAAACTAGATAGATT
ATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCA
CTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGC
TGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAACTGCAC
[T, G]

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AATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCATCTCC
 TAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGACACATTAG
 ACCATAACACTGTGTGAACCTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTT
 TGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGA
 CAAATGTGAATAAACTTCATAAACTGTTAAATTCCAGACCAACATTTCCTAAATGTGTT

11557 TGGAAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGT
 TGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATTATAGACAACAGAAATTT
 ATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCACTGGTAGATTTGGCATC
 TGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGCTGTGCTTACACGGTA
 GAAAAAGTGATGGGTCTTTCTGGGCTTCTTTGATAACTGCACGAATCCTAATCATGAAG
 [C, G]
 CTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCATCTCTTAATAACATTACCTTTG
 GGGTTAGGATTTCAACATATGAATTCTGGGGGACACATTAGACCCATAACACTGTGTGA
 ACTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTGGGTAAAATAAAGATC
 ACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATGTGAATAAACTT
 CATAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGAGACATAAGCTA

11708 AAGATCAAGGCACTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATG
 GTGCCTTCTTGCTGTGCTTACACGGTAGAAAAAGTGATGGGTCTTCTTGCGCTTCTT
 TGATAACTGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAA
 AGGCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGG
 GGGACACATTAGACCCATAACACTGTGTGAACCTGGCCAAGTCACCTAACCTTTCTAGC
 [A, C]
 TTAGTTTTCTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGAT
 GATCAAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTT
 CCAAATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGG
 TGTCATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCA
 TGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTA

11953 ACATTAGACCCATAACACTGTGTGAACCTTGGCCAAGTCACCTAACCTTTCTAGCATTAG
 TTTTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATC
 AAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAA
 AATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGTC
 ATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCA
 [C, T]
 GTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCA
 ATATAAACATTTATTATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTTTAATTG
 GGTGGTCTGACTAGGAGTCTGTCTATTGATTGTGGTCAGATGTTGTCCGGGCTGCTGTCT
 CTGATGGCTTACTGGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGC
 AAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCCTGTCCATGG

11967 ACACGTGTGAACCTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTGGGTA
 AAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATG
 TGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGA
 GACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGTGATGGTAAAGTCAGT
 TTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCACGTTAGCATGTTAC
 [T, C]
 GTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCAATATAAACATTTAT
 TATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTTTAATTGGGTGGTCTGACTAG
 GAGTCTGTCTATTGATTGTGGTCAGATGTTGTCCGGGCTGCTGTCTGATGGCTTGACT
 GGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGT
 GTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCTGTCCATGGGATGCTTATGTGTA

12172 TCTGAGAAGAAAAGTGGTGTGATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCA
 TTCTAGAGAGTCATGACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCC
 CAACATTTAGTGGCTTAAATCAATATAAACATTTATTATCTCATAAGTTCTGTGGATCAA
 TAATTAGGGATAGTTTAATTGGGTGGTCTGACTAGGAGTCTGTCTATTGATTGTGGTCAG
 ATGTTGTCCGGGCTGCTGTCTGATGGCTTACTGGGGCAGGAGGATCTGTTTCCAAG
 [A, C]
 TGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTTG
 CCAATGTGGGCTGTCCATGGGATGCTTATGTGTACTCATATGTGACATGGTGGCTGGCT
 TCCCAAGAACAAGTGATTCAAGAGAGAACAAGGTGAATTGGCAACACTTTTTATGACT

FIGURE 3, page 55 of 107

TAACTTCAAAAATCACATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCAC
TAAAGTTAGTCCACATCTGGGGAGTGGTGGGGTGATCACATTCACGTTGGAAGGGAGAC

12188 GTGTCATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATC
ATGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTT
AAATCAATATAACATTTATTATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTT
TAATTGGGTGGTCTGACTAGGAGTCTGTCAATTGATTGTGGTCAGATGTTGTCCGGCTGC
TGTCATCTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTG
[G, A]
CTTGCAAATTGCTGCTGTTGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCCTGTG
CATGGGATGCTTATGTGTACTCATATGTGACATGGTGGCTGGCTTCCCCAAGAACAAGTG
ATTCAAGAGAGAACAAGGTGGAATTGGCAACACTTTTTATGACTTAACTTCAAAAATCAC
ATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCACTAAAGTTAGTCCACAT
CTGGGGAGTGGTGGGGTGATCACATTCACGTTGGAAGGGAGACATGTCAAAGAATTGA

13472 GTCCCTTCTTTTACAGATTGACTGACTGACAACTTAACTTTCTTGGGTAAAGCCAGAAAA
AACAGGATGGCCTCCAGGCCGAGCAGTAGAAATGCTGGGAATGGGGTGTCTGGTGTGTG
TCTGGTGTGTTCTCTGCAGTGCCTGCAGGCCATGTGTCTGTATGGTGACTGAAACGCAAGT
CGGCATCCAGCCAGGATGGCAGGGACCGTGTGCCTGGGGTGACGGCAAACACACAGTGA
GAAGCTGCTGATGGAGGGAGGACCGTTAGCACTCCTTGTCTATTTTGTAGTAAACATTTT
[-, T]
TTACAATCTTGTGTCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATG
CATCCAATGACTTAGAGGTTCCCATGTTTCCAAACATTACATGCCTGGCTTATTCCTGAG
GCAGTTTTGTATTCTGAAGGAAGTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAA
TATGGTTTTCTTTGAGTAGCACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGA
ATATGTCACCTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTT

13781 TTGTTGCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATGCATCCAAT
GACTTAGAGGTTCCCATGTTTCCAAACATTACATGCCTGGCTTATTCCTGAGGCAGTTTT
GTATTCTGAAGGAAGTTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAATATGTTT
CTTTTGTAGTAGCACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGAATATGTCA
CTTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAG
[A, C]
TGCTTGGGGCCCCAGTCACATTCAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAAC
CAAGAGTGGAAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTT
GTTTTCCCCTTATTCTTTTCATCCAGAAATCCCCCATCCCTGCCCAACCAACCCCTGAC
AAGGGACTGACTTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTTCTACTAACTCAAC
ACTTCTGTAGCCCCTTTTTCAGTTCTGAGATCCACAAGGATTCATTATGATCCAGACTA

14031 AAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAGATGCCTGGGG
CCCCAGTCACATTCAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGG
AAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTTGTTTTCCCC
TCTATTCTTTTCATCCAGAAATCCCCCATCCCTGCCCAACCAACCCCTGACAAGGGACTG
ACTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTTCTACTAACTCAACACTTCTGT
[A, G]
GCCCTTTTTCTAGTTCTGAGATCCACAAGGATTCATTATGATCCAGACTAAGCCTCATGC
ACCTAATTTCTCCGCTTTTCCATTTTACTGTGAAAATTGGTCTTAAGTCTGTAGTAT
ACATACTCTAGACTTATTTACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTT
TCCAGTAACACTCCTGCACTCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTT
TTAAATGAACAGAGAAAGGCAATGAGGCACAGGAAAGAGAGCCGTGGTCTCTTGTTTGGA

14110 CCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGGAAAAAGTCTCAGGATGCCA
AGACGCCACTGTGCCCCCTTCTGGTTCTGTTGTTTCCCCTCTATTCTTTTCATCCAGAA
ATTCCCCCATCCCTGCCCCCAACCAACCCCTGACAAGGGACTGACTTTCAGGGTGGTTTCTA
CACTGGTGATTTTAACTTCTACTAACTCAACACTTCTGTAGCCCCCTTTTTCTAGTTCTG
AGATCCACAAGGATTCATTATGATCCAGACTAAGCCTCATGCACCTAATTTCTCCGCTT
[T, C]
TCCATTTTTACTGTGAAAATTGGTCTTAAGTCTGTAGTATACATACTCTAGACTTATTT
ACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTTTCCAGTAACACTCCTGCAC
TCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGG
CAATGAGGCACAGGAAAGAGAGCCGTGGTCTCTTGTGTTGGAGATGTGGGTTTTGCTACTG
GTTGGAAAGTGAGGTGTGGCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGT

FIGURE 3, page 56 of 107

14248 CCAACCACCTGACAAGGGACTGACTTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTT
CCTACTAACTCAACACTTCCTGTAGCCCCCTTTTTCAGTTCTGAGATCCACAAGGATTCAT
TATGATCCAGACTAAGCCTCATGCACCTAATTTCTCCGCTTTTCCATTTTACTGTGAA
AATTGGTCCTAAGTCCTGTAGTATACATACTCTAGACTTATTTACAGCTGGGCATAACAA
CGGTGGCTCATGGCACTCAAAGTTCCAGTAACACTCCTGCACTCACAGTCTGGTATAGA
[A, G, T]
CATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGGCAATGAGGCACAGGAAAG
AGAGCCGTGGTCTCTTGTGTTGGAGATGTGGGTTTTGCTACTGGTTGAAAAGTGAGGTGTG
GCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGG
TCTTACTTACTAAGGAACCTTTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTGA
AGTGGGAGGATGACACAATCAGATTTTAAAAGATTATTTAAATCGCTAATAAATCAAAT

14676 GCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGGCTTACT
TACTAAGGAACCTTTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTGAAGTGGGA
GGATGACACAATCAGATTTTTTAAAGATTATTTAAATCGCTAATAAATCAAATGATGGGT
TCAGCGAATGTTTGAGAGGATACTTACTGTGTGACAGGCATAGTCTGGCCTTACCTGG
GGTATCTGTGATTCTTGTAGGAATCCTACATAAAAGCTGTTAAATATTTTAAACAGAAA
[T, C, A]
AAGCTTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGG
GAGGTGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTCATTAAATGATATT
TTCCCTGGCTTTGTACATGACCTTGATTCTGTGATAATTGTCATATCTAGAGTCGATG
AATCAATACATGCAAACTGTGGTGGCTCGCTCATATTCTGTTATACTTCAGACGCCTT
TTGGAAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATAC

14981 TTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGGGAGG
TGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTCATTAAATGATATTTTCC
CTGGCTTTGTGTACATGACCTTGATTCTGTGATAATTGTCATATCTAGAGTCGATGAATC
AATACATGCAAACTGTGGTGGCTCGCTCATATTCTGTTATACTTCAGACGCCTTTTGG
AAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATACCCGC
[C, T]
GTCACCTTTGTTTCTGGTGTGTCCAGAGGTATTGTAACATTGGGGTATTTCTCCTTTGACT
CTAATGGGACCCCTGCTAGTTGTGTTCTTGTGGCCTCAGCTTGGGAAGGCCTCCCAAAAG
CCTGAATTAATGAAAGCTTCTGATGTGCCGATCCCTTTCTCTGGCAGGGTGAACGCAG
TTTCTATAGGAGCGTGAATGCCTGTGCTCAGGCAATAATCTCTGCATTACAGCCTCAGTA
CTAAAGACAGGCAGAGCAGACAGCCACAGGGGGTGGGATTGAGGAGCCCTATAAAGTCC

16365 CAAAAAGAGGACAAAGCATATCTATGAACCCGTAATGCTAACCTTCATTATTCAACAGTG
ATGCTTATGGCAATGCCAACGGGTGTGGGGCCTTTTATTAATTTTAAATTTAGTTTTT
TATGTTTTTGAGACAAGATCTTGATTGTGCGCCGAGCTGGAGTGCAGCGGTGCAATCAC
AGCTCACTGCAGCCTCGATCTCCTGGGCTCAATCAATCCTCCCACCTCAGCCTCCTGAGT
AGCTGGGACTATAGGCATGTGCCCCAGACTTGGCAAATTTATGCATTTTTTGTAGAGAC
[A, G]
GGATTTTGCCATGTTGCCAGGCTGGTCTCGAATCCTGAGCTCAAGCAATCCGCCTACC
TTGGCTTCCCAAGTGCTGGAATTACTGGTGTGAGCCACCGTGCCCTGCCTGCTTGAGCC
TTTTTGCTATTCTCCCTCCTATGGGAAAAAGAATCGAGAAAGAGCAGTAGGCTCTACTAG
AGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCTCTATGTCTGCAGCAAGTAC
AAATGTGAGTGTATATTCAGCCTCTGAAGAAGACATCTATCCATTTCTTCAGTGAATAT

16827 GAGCAGTAGGCTCTACTAGAGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCT
CTATGTCTGCAGCAAGTACAAATGTGAGTGTATATTCAGCCTCTTGAAGAAGACATCTAT
CCATTTCTTCAGTGAATATTTGCCCGGAGTCTTCTTCGTGACAGGCACTGTTGTAGGCC
TGGAGGTACAGCAATAAACAAGACGAAGTCTCTGCCCTCCTGAACTAACCGTTTAGCCA
AGGCTTAGCATCTCTCACTCAGGTCAACTTCTGCATTTTAGAAATCTGTTTCAGGCAC
[G, A]
CATTTGACAAGTAAAGAGGTTCCAAAAATACATTAATAAGGATGAAATGAGGCCATTCT
GATATTCATTGCTTGGCAAAATGCTTAATATGGGAATTTAATATGGAATGGGTGCTGA
TGCTGTCAAAGGTGGTGACATTTCTGTAGAAAATTCAGTGATTTCAAAGAAGGCCTCAGA
GCTGCCCTAGTTTGAATTAGATATTTGAAGAATCTGTGTTAATTAGGACTCTGTGGCTT
GTGCATGTATACTGGGACGAGACTGGAGTTTGTGTCTCTCCATGATGATGGCATGTAAA

17599 TGTCTTTTGAGTAGGAGGAAATTAGGACTTTTGTCTGTTATATGCCTTGCACTCTCTTGG
CCTTCTCTGGGCTGCTGGGGCAGAATGAGGCCAACAGAGAACCACGGATGCCAGTCTGGG
TCACAAGGGCTTAAGGAAGCAGCAGATGTTGGACTGACTGGGGTGTCCATTAAGAATCC

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AGGGGTAGTGAGAGTCTTACCTGGAGTTTGAGGCCGCACTTCCATTGCCAGGACTCTCAG
CTGAGTGGCTGGAAGAGACCTGTAGGAGCCATCCTTCCAGTATCTATCAGAGGTTTCTGC
[A, T]

CTGTTTAAAGCTCGTCTAGTGATCGAGGGAACCTTGACTGGGGGTGCTGATGATTATTA
ACAGTGGCCATACTCCCACGGCTGCAGGTGGAGATGAAGTGTGATGAGAAGATGAGCA
AGAGCTCAGGTGTGCCCCACCAGCTCTGCCACTCCCAAGCTGCCGAACCTAGGCACTAAC
TTACCTCTCTGTGTCTGCTTCCCACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCC
TAGGGAGTAGGTATGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGA

18093 TCTGCTTCCCACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCCTAGGGAGTAGGTA
TGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGAGCACAGTGCCTGG
CACACAGGAGGCACCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGA
GGGTCTTCAGTGGCTCAGGCACAGTACTCAGTGTAAACATATAATATGTAATTTATCT
TCACAGTAGCCTGAGTCACTTGCTTGTCTTCTGTTAATATCCTAATGTTTAGCTCACC

[A, G]
ACTTAGATGCTCATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTT
AAAAAATAAGAGCTTTATTAAGATATAATTTACATACCATAAAATTACCTATTTAAATG
TACAATTCACTGGTGTGTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATT
GTAGAAAATTTTCATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATT
TTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTAT

18226 CCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGAGGGTCTTCAGTGG
CTCAGGCACAGTACTCAGTGTAAACATATAATATGTAATTTATCTTCACAGTAGCCTG
AGTCACTTGTGTTCTTCTGGTTAATATCCTAATGTTAGCTCACCAACTTAGATGCTC
ATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTAAAAAATAAGAG
CTTTATTAAGATATAATTTACATACCATAAAATTACCTATTTAAATGTACAATTCAGTG
[G, C]

TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC
ATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCATTTTGGGCATTTCA
TGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGT
GTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTCAAGGGTTCACCTCATGTGGCATC

18467 TTTATTAAGATATAATTTACATACCATAAAATTACCTATTTAAATGTACAATTCAGTGG
TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC
ATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCATTTTGGGCATTTCA
TGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGT
[-, T, G]

TGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGTTCACCTCATGTGGCATCC
ATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGTTGTATTAGTCCATTTG
GAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTCATGGCCACCCATCTG
AAAGCGCTTGAGCTGGGATTTGCTCAGGTCCATCTGGCTCCAAGGCAAGACCTTGCC
CTTCTCATCCACTCACTGGTCTCTGTTGGACCTCTGCATCATGCTGAACACCATTTCTA

18511 ATGTACAATTCAGTGGTTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTA
ATTGTAGAAAATTTTCATGACTCCAAAAAGAACTCCATATCCATTAGCAGTCACTCCCC
ATTTTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCC
TATTTTGGGCATTTTCATGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGT
GTGTGTGTGTGTGTGTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGT
[-, A, T]

CACTCATGTGGCATCCATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGT
TGTATTAGTCCATTTGGAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTC
ATGGCCACCCATCTTGAAAGCGCTTGAGCTGGGATTTGTGCTCAGGTCCATCTTGGCTCC
AAGGCAAGACCTTGGCCTTCTCATCCACTCACTGGTCTCTGTTGGACCTCTGCATCATG
CTGAACACCATTTCTATAGAGATGGGTGTGTCCCACTGGGTGTGGACATCCTGAGGAATT

19107 GAATTGCTGTGGTTGCAAGAACTCTGATATTTCCATCTACCTTGAGGGGGATATGGTTT
CATGTCTGTATACTCACATAGTGTGACCAGTCTAATCTTTTGTCCATTTCTTAAGGGT
TATGATATGAACCTTGAAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTTCTGGG
TTGGAAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTCATCCTTCTTGTGTTG
TCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCCTCTGCCCC
[G, A]

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TGCCCCCTCCCCAGCCCCAGTGCTTTTCTGGAGACATGAGATGGTGTATCCCTTCCTCA
 GTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGCATGGT
 ACCAGCAGGCTCTTGGGCAGGGATGTGTGTCTTCACTTGATCATCAGGGAATGAGCTATC
 ATGATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCCACATTCCCCAAAATTACT
 TTTGTCTGCTCTGTTCTCTCACATGCTATTCTAGGGAAAAGGTCCCATTTTATCATTA

19223 GGGTTATGATATGAACTTGGAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTTC
 TGGGTTGGAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTCATCCTTCTTGT
 GTTGTCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCCTCTG
 CCCCCTGCCCTCCCCAGCCCCAGTGCTTTTCTGGAGACATGAGATGGTGTATCCCTT
 CCTCAGTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGC
 [A, G]
 TGGTACCAGCAGGCTCTTGGGCAGGGATGTGTGTCTTCACTTGATCATCAGGGAATGAGC
 TATCATGATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCCACATTTCCCCAAAAT
 TACTTTTGTCTGCTCTGTTCTCTCACATGCTATTCTAGGGAAAAGGTCCCATTTTATCA
 TTAAGATGCAATGAGATTTCCATCTTGCTTCTACCAAGAAGGAGGAAAATAACCTATA
 TAAACACCATGAAACCTTACTTTGACTTAAAC TAGTGGAATTTGGCCCCCTGAATCAGAT

20102 TGGAAGGCAGGAAGTGTGGGGAATTAGTGGACCCAGGAGGCCCTCAACCAATAACT
 GATGGAAGATGGTGCCTAAACACCCCAATTCCTCAGCCTTGGGTAGGGTAAC CAGGAA
 TATGGTTTACATGGGGTCCCAGTTTCTCTGTAGGAAAAATTCCACTGGGCGACAGCAGT
 AGCTAGTTAGAACTTCACTTTTATTGGTTTTCTTGGCTGCCTTCCCAGCCCTTTCTCT
 TTTCTCTAATTCCTACTGGCGATTCTTCACTTCCCAAACAACCACTTGTGCTCAAA
 [T, C]
 GTAATTGTAGGATCAGCTTCTGGGGAACCCAAATGAAGACATATGGTAAAGCTTCCCTC
 TTTTCTTGCTTTTCTGCCTTTTGCCCCAATCAGTTAGCTTTGATGGTGGGAGTGAGGGGA
 TGCTCAACCTCTCAGGCAGGCTAATGGCTCTCAGGAGACACAATCCACAGCTGATTGGCA
 GTTTTCTCCCCAAGATATCTTCAGAACAAACCTGGTGCTGGTGAGTGATCCATGCAGCA
 TGAAGAGAGAGGGTGAAGCTTGATGAGGCATGTTCCAGTCTCATCAAACTATTTTGTTC

21946 TTTTGTGGAGACGGCCTCCCTATGTTGCCAGGCTGGTCTCCAACCTCTGTTTTTCAAG
 CCATCCCCCTTCTCACTCTCCCAAAGTACAATTTAGTATATTTATTAACGTGTGTTC
 GGCTTTTGTATTGCTATTGAGATGCTAATGAGATGGTCCCTGTCTATTAAAGAGCGTCCAT
 TCTGGTGGCACAAGGAACCTCAAATATGACACAAGACAGAATACCTACTCCAGAAGAGAG
 TTCTGTGAAGCGTGAAGGAGGGACTTGAGTGTGCGATTGAGGAAGGACTTCACATTGGA
 [G, T]
 GGAGTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATACATCATT
 GATAAAAAAAGAAGCAATTGGTTCGAAACAACCTTCAATTTCCCAGATCAAGTCTTCTAGG
 TTACCTGCATCTGCACCCACCAGTCCCACCTTGATTCTCTCTAGATGAAGGGCGTCTTT
 TCCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGACTCCTTTGCTCTTTGGGGCATCC
 TCTCTTCTCCTGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAGTGTATAC

22240 ATTGAGGGAGTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATA
 CATCATGATAAAAAAAGAAGCAATTGGTTCGAAACAACCTTCAATTTCCCAGATCAAGTC
 TTCTAGGTTACCTGCATCTGCACCCACCAGTCCCACCTTGATTCTCTCTAGATGAAGGG
 CGTCTTTTCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGACTCCTTTGCTCTTTGG
 GGCATCCTCTCTTCTCCTGGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAG
 [T, C]
 GTATACATGGGCTTCCGTGTCTATCCCCCTTGATCCCGCATTGCCGCCAGCCACCCCTCAT
 TCCTTTAGGCCTTTTACAGCAAAATTGCTGGAAAGGGTGGTCTGAAGTCACCATCACTAC
 TTCTCCCCCTCACATTCTTTCCAAGCCACCACCTTATGGGGGCTGCTCCTTTGGAGG
 CCACTTATGGACATTGCATCACCTTTCTGCTCTTTTATCTTAAGTACCAGTTAGGATGCT
 TTCAGCTGCCTGTTGAGAATGTCTGATACAAGTGACTTACACAATACGGACATTGACT

22679 TTCCAAGCCACCACCACTTTATGGGGGCTGCTCCTTTGGAGGCCACTTATGGACATTGCA
 TCACCTTTCTGTCTTTTATCTTAAGTACCAGTTAGGATGCTTTTCACTGCCTGTTGCGAG
 AATGTCCTGATACAGTGACTTACACAATACGGACATTGACTGTTAAGAGAGTTACGTTT
 TCACTGAACAAGGATGTTCCAGGCTTGGCTTGGGTGTTTCATAACACCTTCAAGGACCCA
 GACTTCAGTTTCTGCCCTGCCTCTCTGATCACATCAGCAGATATTATGTCGTCTAAAA
 [A, G]
 CAGGGAAGGGAGTGAAGTAGCCTCTGTGTTTTTCTTTTATCATGGAGGATGTTTTTTTT
 GCCCTGCAAGCCCCATGCACATTTCTTAAATATCACCCCTTAACTCATCCCTGGCAAAG
 GGGATGGTATTATCCTTATTGGCTTGGACCAATTAAGATTCATCCCTGAGTCTGTGAA

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TGGGACGCATCTTCTTTGAAATGTTGTCATTTAACCAAAATTGGATCTGTTAAAGGAAGG
GGGAGCGCCTAAGGTGAAAGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTA

23178 AAATGTTGTCATTTAACCAAAATTGGATCTGTTAAAGGAAGGGGAGCGCCTAAGGTGAA
AGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTAGCAATTTTGACAGCCAGC
CACCCCATCTTCTGAAGCACTTCATTTCCATCACATGCTTTGTGACATCATTTCTCT
GGGTTTTATTTATTTATTTATTTATTTATTTATTTGAGACAAAATCTCTCTGTTGCC
AGGCTGGAGTGCAGTGGCACGATCTCAATTCAC TGCAACCTCTGCCTCCCGGGTTCAAGT
[T, C, G]
ATTTTCCTGCCTCAGCCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGC
TAATTTTTGTATTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAAC
TCCTGACCTCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGTCATAA
GCCACCGCGCTGGCCGCTCTGGGTTTTCTTTAACTTTCTGGCCACTCCTGTTTCCTG
TTGACTCCTTTCTATTGCTCTACCTCAATTGGTGAATGCCCAAATAGTTAGACCTGA

23370 TTTATTTATTTTTTTATTTATTTGAGACAAAATCTCTCTCTGTTGCCAGGCTGGAGTGC
AGTGGCACGATCTCAATTCAC TGCAACCTCTGCCTCCCGGGTTCAAGTGATTTTCCTGCC
TCAGCCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGCTAATTTTTGTA
TTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAACCTCTGACCTCA
GGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGTCATAAGCCACCGCGCC
[T, G]
GGCCGCTCTGGGTTTTCTTTAACTTTCTGGCCACTCCTGTTTCCTGTTGACTCCTTTT
TCATTGCTCTACCTCAATTGGTGAATGCCCAAATAGTTAGACCTGAGGTCTTCTTGT
CAGGATCTGTAGGTTCTCTGAGTGATCTCAGCAGTCCCTTTGTATCATCTATATGCCGA
GTATATCTAACTTGCTTCTCTCAAGAGTTTGTCTCATCTATTGAATGAGTTTCCCATCT
CATTGATGGGCACCGCCATCTATCTGTATAGTTGCTTAAAGTACGGGCATGTTGCATGAG

23583 CAGACTGGTCTTGAACCTCTGACCTCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCT
GGGATTACAGTCATAAGCCACCGCGCTGGCCGCTCTGGGTTTTCTTTAACTTTCTGG
CCACTCCTGTTTTCTGTTGACTCCTTCTCATTGCTCTACCTCAATTGGTGAATGCC
AAATAGTTAGACCTGAGGTCTTCTTGTCAGGATCTGTAGGTTCTCCTGAGTGATCTCAG
CAGTCCCTTTGTATCATCTATATGCCGAGTATATCTAACTTGCTTCTCTCAAGAGTTT
[A, G]
TCATCTCATTGAATGAGTTTCCCATCTCATTGATGGGCACCGCCATCTATCTGTATAGTT
GCTTAAAGTACGGGCATGTTGCATGAGTCTCTGTTTCCACCCCTGCCATTTTGTCTC
CACTCACCAGCAAGTCTGCCTGATACGATATCTAGAACACATCCAGAATCTGTTTGT
CTCTCCATTTCTGCTCCTGCCACCTCATTCCACGCATCTTCTGTTGGAGAGCTGACA
GCCTTTTTATCGGCCTCCTTTCTTACCCTTGCTCCCAATAATTGATCCTCCGTGGAAC

24159 CCCAATAATTGATCTCCGTGGAACAGCCACAATGATCTTTTAAAAATATGAATCTGATT
TCTCTTGACCCGCAGCTTAAATTTCTCTATCGGTTCTCTTTCCACTCGGCATAAAATCT
GCTTTCTGGTGCTGGCCTGCAGCACCTGAGTGCTGGCTGTGCTGACCTCCTTTCCAAGG
CTGGTCTTGAGCCGTCTTCTCTAACCATATGCTGCACCTTCTTCTGCTTTCTTGAATAA
AACAAGCTCCTCCTGATCTGAGGGCCTTTACGGGACCTCTTTTTTTTTTTTTTCTCCTAG
[G, A]
ATTATCTTCTGCCCAATTTTCATAGGACTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCA
AATGTCATGTCTCCTCAAGAATCTTTCTTAACCGCCCACTCCTGCTGGGCACCTCTGTT
GTAGCATACTGTTAGGAGTCTCTGCATCATGCCTCTAACTCTTTGAAAAAAGTTCTATT
TGTTAGTTTAATAAACTAAAATAAAAAATTTATAAACCAAAATTTCAAATTTTAAAAAT
TAATAAACTAAAAACAGTACAATGATATCTCTGTGAAGTCAAGGGAGGAGAGAGTTTTAA

24307 GAGTGCTGGCTGTGCTGACCTCCTTTCCAAGGCTGGTCTTGAGCCGTCTTCTCTAACCT
ATGCTGCACTTCTTTCTGCTTTCCCTGAATAAAACAAGCTCCTCCTGATCTGAGGGCCTT
TACGGGACCTCTTTTTTTTTTTTTTCTCCTAGGATTATCTTCTGCCCAATTTTCATAGGA
CTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCAATGTCATGTCTCCTCAAGAATCTTCT
CTAACCGCCCACTCCTGCTGGGCACCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCAT
[C, T]
ATGCCTCTAACTCTTTGAAAAAAGTTCTATTTGTTAGTTTAAATAAACTAAAATAAAAA
ATTTATAAACCAATTTCAAATTTTAAAAATTAATAAACTAAAACAGTACAATGATAT
CTCTGTGAAGTCAAGGGAGGAGAGAGTTTAAAGAAGGGGAACCTAATTAGCAGCACTAAA
GGCTCTACAACGACTCAAGATAATGATAATGATGATGATGATGATGGTGATAATGACAGT
GATAACTAACATTTATGTTACTATGAACCTGGAAGAGTGCCAGGCATTTTGCGTACATT

FIGURE 3, page 60 of 107

24493 TCTCCTCGCCTCTGAAATCTCAGTCCAAATGTCATGTCTCCAAGAATCTTTCTCTAACC
GCCCACCTCTGTGGGCACCCCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCATCATGCC
TCTAACTCTTTGAAAAAAGTTCTATTTGTTAGTTAATAAACTAAAACTAAAAATTTA
TAAACCAAATTTCAAATTTTAAAAATTAATAAACTAAAAACAGTACAATGATATCTCTG
TGAAGTCAAGGGAGGAGAGAGTTTAAAGAAGGGGAAGTTAATTAGCAGCACTAAAGGCTC
[T, C]
ACAACGACTCAAGATAATGATAATGATGATGATGATGATGGTGATAATGACAGTGATAAC
TAACATTTATTGTTACTATGAACCTGGAAGAGTGCCAGGCATTTTGCGTACATTATCATA
TTTAATTCTGACAGATTAAGTCTGACAATGCCTCTACTGTCAAGGAATGTTATTCTC
ATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCTGGCACATGGTAGCTTTC
GATTAATGTTTGCTATGTGAGTAAATAAATTTCCACAAGGTCTGGAGCTGGTGAATGGT

24822 ATGATGATGATGGTGATAATGACAGTGATAACTAACATTTATTGTTACTATGAACCTGGA
AGAGTGCCAGGCATTTTGCGTACATTATCATATTTAATTCTGACAGATTAAGTCTCTGA
CAATGCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGG
TCAGTCAAAGTGCTGGCACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAA
ATTTCCACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGAC
[C, T]
GAATCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAAC
CCCTTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTCTTATTTATTTAA
AACATGATAAATAAAATTAATTTTCAGTCCAAAACCTTCTGAATTTTGGAATTTCTGGACT
CCATTCAATTCATTTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGA
ATCCAGATTGAACAATTTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCA

24946 GCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAG
TCAAAGTGCTGGCACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAAATTT
CCACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAA
TCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCC
TTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTTATTTAAAC
[-, A]
TGATAAATAAAATTAATTTTCAGTCCAAAACCTTCTGAATTTTGGAATTTCTGGACTCCAT
TCATTCAATTCATTTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCC
AGATTGAACAATTTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTT
CATTGTCCAGGAAAGCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACT
TGAATTACGTAGTGAGCAGGTGCTTCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGA

24947 CCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGT
CAAAGTGCTGGCACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAAATTTT
CACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAAT
CCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCT
TAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTTATTTAAACA
[-, A, T]
GATAAATAAAATTAATTTTCAGTCCAAAACCTTCTGAATTTTGGAATTTCTGGACTCCATT
CATTCAATTCATTTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCCA
GATTGAACAATTTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTTT
ATTGTCCAGGAAAGCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACT
GAATTACGTAGTGAGCAGGTGCTTCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAG

24959 AGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCTGG
CACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAAATTTCCACAAGGTCTG
GAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAATCCAAAGTCCGT
TTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCTTAACAGATTGAG
AAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTTATTTAAACATGATAAATAAA
[T, C]
TAATTTTCAGTCCAAAACCTTCTGAATTTTGGAATTTCTGGACTCCATTCAATTCAT
TTGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCCAGATTGAACAATT
TTCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTTTATTGTCCAGGAA
AGCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGT
GAGCAGGTGCTTCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTTA

25321 TGAAGGCATAGGTGAGTTCTTTAAAGAAGCATTAGGAATGAATCCAGATTGAACAATTT
TCTTATTAAATACCCTAAAGATGCATTCTTATGATGAGCCAGGTTTATTGTCCAGGAAA
GCTATTAAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGT

FIGURE 3, page 61 of 107

AGCAGGTGCTTCCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTTAA
ATGTTTTCTGGCATGTTGGCCTTTGGTTTCTCATATTATGGGACATATGTTTAGTGCTTG
[T, G]

GGTATATGCTTAGCCTACTCTTGTAGGATGACTGAGACCTCACACAACATCAAGGACATA
GTCTTTGCCTTTGCTGAGTTCAGAGTGTAATTGGAGTGATGAAACATACATGTGAATAAA
TGCAAAGTCACAAGTAAAGACAGTTAATGTGATTGATGAAGGACGTGTGGCACAAGATGG
ATAAGAATGAGAAGTAGAAGAAGTAGGTGGTTTTGAACCTTTCGTACTCAGGGAAGGGAA
TGATGTGGATTGGTGGAGAAGAGAGGGGAGGAAGATGGTTTTAAGCACTGGTAAGATGG

27280 TATGGATACCTTACATGCTAGGTTGAACATGGATTATTTTTCACAGATGATCAGGAGCCA
TGGAAGGCTACACTAGCTGGGCGTACATAATTTAAGTCAGAGGGACAAATAACTGCAAGC
TAAATACTCTTAGGGAGAACTGCAGCAATCTGGGTGAGAAACAATGAATTTGTGAGTAG
TCACCATAGCAAAGGTCTGGGCTAGGGGGGCACTGGAGGAGTAAAAAGAAAGGTTTAAA
TAGTCACTGAGAGGGCTGAGGACCCACTAGCCACTGGCATAGTGGAGTCAATCATTCTC
[C, T]

GAAATTACGAGGAGGAGAGGTGGGGCATCTCTAAGGCGTGGAGCAGTGGAGGATGGTGAT
TGTATGGTAGGGGAAAGAAGATAATGATCGCAGTTCAGTAGGTGATGGATGAGGAGGGG
AAGGCGTTTTTACAGATTATTCCTGGGAAAGAACAGAGGCAGTCCACACTGTAGTTAATT
CCTTTTATTTTTGTCTTTAAGTATACTCAAGGATAAATAGCCATACAATTTCTGTTTGGC
TTTTTCATGCTGGAGAGGTGCAGAGGTTGCACTGAACGTGGACGATATTAATTTTGACTTG

28062 GTGGCTGTGGATGCAATTCTGCCTTTACACAGAAATGACTCTCCTGGGCATACCTTTAGG
CAAAGAGCAGATGAACGCATAACGAGCAGCTTTGAGATTTGGTATTTCCACTGCAGAACG
AAGAGAAGGGTGGCCCACTGGAAATTTCTCAGAGAAACGTCTAAGTCTGCATCTCCAC
ATCCATTCATTTTTCATGCATAGTTCTTTTCATCTGTTGTTTTTAATTTATCTATTTTATA
TAATGTCTATCTCTGTAGTACCTGGGATGAAATGCGCCAATCTGACTGCAATGAATAGG
[G, A]

CAAAGCAATTCTTTGGGAGCTGCTCTGGGCAGGAAGTGGAGGCTGAATTCTTTTAAAGGAA
AATTTTTTGGGGATCGTGACTCACTGGCCTTCATCCCCATCATCACTGGGATTGGTTAAG
TGCCAGGAAACAGCTGGAAGTCGACAGACAATTTAGGGTACAAATGAAAGGAGAAGTTAC
TGTTAAAGGGATCTGTATTCTCTGTATCAAACCACCAACGCTGTCTCCTAGCTAATAG
GAACCAAACTGTGCCCTGAGAATGCTGCCAGATGTTTCTCAATAGGCACGTTACGTTTT

29033 ATGTTTCTCCAAGAGAAATGTTCTATTGTACTACATTAATTCTTAGATGCATTTTGAAT
TATTTACCCTTCTGAAATCAGAATGTGTCTTACTAGCAATATGTCATAATTTAATTGGCA
ATTTAAATTTTCAAGAGGCACATAAGATAATGATGTGTTTTGTAATTGACAATGTCTTGA
TTTGATAGAAGATATTTGTACAATACTATATTGGTACCATGCTTTGGCCGATGTAATGGT
CCTATTTGGAGTTCACTACTAATGTTAAGCCTCTAGTTTTAGGCGTTGATGTTGGTCCAG
[G, C]

GACACTAGGACTCAAATGCCAGATGTCCAGGTCTAAGAGAGAAGAATCAGAAGGTGAAT
GCAGAGCCCAGTGGGTTCAAGCCATGTAGACAATAATAGCAGAATGGAGAGACATTTTCC
GATGCCTCATGTCTATGCATCTTCTCTCCCTTTCTGGCCTGCCACATAAATTCATTGCAG
TGCAACTCTGCCAGATATCAGAATAGAGCAGGAGGAAAGAGAAACAGCTGCAGCATGGGA
GATAGGACTCATACCAAGAGAGATTAGGCTCGGTGTGTATACCTAATGATGGTAAAGTGA

29302 CCTCTAGTTTTAGGCGTTGATGTTGGTCCAGGGACACTAGGACTCAAATGCCAGATGTC
CAGGTCTAAGAGAGAAGAATCAGAAGGTGAATGCAGAGCCCAGTGGGTTCAAGCCATGTA
GACAATAATAGCAGAATGGAGAGACATTTTCCGATGCCTCATGTCTATGCATCTTCTCTC
CCTTCTGGCCTGCCACATAAATTCATTGCAGTGCAACTCTGCCAGATATCAGAATAGAG
CAGGAGGAAAGAGAAACAGCTGCAGCATGGGAGATAGGACTCATACCAAGAGAGATTAGG
[C, -]

TCGGTGTGTATACCTAATGATGGTAAAGTGAACAACCAGGTTACAGTGATAGCAGCAACA
CGCATTTATCGAGTGTCTATCCACTTCAGAAACACTATTTTTTAAATGATAACAATTCTA
CAAGATAAGTATTCATTGATCATCAATATTATCCTTGTTTCATGTGTAAAACTGGGGCTC
AGAGAGGGTAAAAAATTTGTCCAAGGTCAACAGTTAGGAAATGGTAGAACAGGATTCA
GGCTTTGCTCCATGGGGCATCAAGGTCTGCTCCACTTCCAGTGTGCCATGCAGTTTCCCC

31093 TCTTTTAGAGTTTCCAGTATAAGAACAAATAGATGAGCAAACACATATAAGAAATACATT
GAAGAGAATTAGAATATTCATGAATGTACAGTGAGAAATTTTAACTATACAGGGTCAT
AGTTGACTTCATTTAAATATTTTCTAAGGGTAGAACGCAACATTATTAGAATACCTGAGA
GGGGAAGGTTGGGACCGTGCCCTTGAAGTAGCATATTAATTTAAGAGAGGAAAGAGAAA
GCTGGCAATATTTCAAGTCTGGAAGTATCCTTAAGGCAATACTTTGCTGCTGGAATTTG
[T, C]

FIGURE 3, page 62 of 107

ATTTTAAAGACCAGCCAGAATCTCTTGTGGTCCTTTGCCCATGTAGCCCTATGAGGACGT
 TTGTATATTTGGATTGCTTGAGGCCTGAGTGTTCATGGGCATAGGCAGAGTCATTGGATCA
 ACCCATGTATCTGTTGCTTGACACATTGCTCTGGATACATTGTACCCAAGAAATCAGCCC
 AAGTGGGATCCAGCCCAAAAGAGAATTGTTGATTTTCAAACTGAACAGTCCAGGCAAAG
 CTCAATCTAGGGCTCAGATCATGCATCCAGGACTGCATAGTTCTTCATTTCTTGATTCTGT

31454 TTGTATATTTGGATTGCTTGAGGCCTGAGTGTTCATGGGCATAGGCAGAGTCATTGGATCA
 ACCCATGTATCTGTTGCTTGACACATTGCTCTGGATACATTGTACCCAAGAAATCAGCCC
 AAGTGGGATCCAGCCCAAAAGAGAATTGTTGATTTTCAAACTGAACAGTCCAGGCAAAG
 CTCAATCTAGGGCTCAGATCATGCATCCAGGACTGCATAGTTCTTCATTTCTTGATTCTGT
 CTTCTTTGCATTGCTCTATTCTTAGGCAAGTTCATCTTGAAATCCTAAGGTGGCTGCC
 [G, A]
 AAGGCTGCAGACCCTCCTCTGTCTTCCAGATTTACATCCTTCAGGAGAGCGAAAGCTCAG
 TTCCCTAAGGCTGAAACAAAAGTCTTGCAATGGCATCTTTTTGGTCTGATTGGCCTGTC
 TAGGGTCAGATACTCATTCTTTAATTATCATGGTGGTGATTGGGGGAATCGAATGTGCTA
 ATTGGCTTTGCCCTGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAG
 CCCAACTCAAGGGCTGAGAGTGGGCTGTAGTGGTTCCCTAAACAAAATCGGTACTGTTG

31834 AAGTCTTGCAATGGCATCTTTTTGGTCTGATTGGCCTGTCTAGGGTCAGATACTCATTC
 TTTAATTATCATGGTGGTGATTGGGGGAATCGAATGTGCTAATTGGCTTTGCCTGGGTTG
 GTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAGCCCACTCAAGGGCTGAGA
 GTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGACATAATATGGCATGGTCA
 TGGATGCTGAGAGAATGATGTAGAGAAAGGGTGGATGAGAATGGAAGCAGGACTAGGCAC
 [A, G]
 GTGGTTCACACTTGTAACCTCAGCTACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGC
 CAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTATCTCTAAAAAATTTATTT
 TTAATTTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGT
 AGGAGGATCGCTTTCAGCCAGGAGTTCAAAGTTACGGTGAGCTATGATTGCACCACTGCA
 CACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAA

31936 TTGGCTTTGCCTGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAGC
 CCAACTCAAGGGCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGA
 CATAATATGGCATGGTCACTGATGCTGAGAGAATGATGTAGAGAAAGGGTGGATGAGAAT
 GGAAGCAGGACTAGGCACAGTGGTTCACTTGTAACTTCAGCTACTTGGGAGGCTGAGG
 CAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTA
 [C, T]
 CTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGC
 TGCTTGGGAGACTGAGGTAGGAGGATCGCTTTCAGCCAGGAGTTCAAAGTTACGGTGAGC
 TATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAA
 GAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGT
 ATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGA

31947 TGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAGCCCAACTCAAGG
 GCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGACATAATATGGC
 ATGGTCATGGATGCTGAGAGAATGATGTAGAGAAAGGGTGGATGAGAATGGAAGCAGGAC
 TAGGCACAGTGGTTCACTTGTAACTTCAGCTACTTGGGAGGCTGAGGCAGGAGGATCG
 CTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTATCTCTAAAAA
 [A, T]
 TTTATTTTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGCTGCTTGGGAGA
 CTGAGGTAGGAGGATCGCTTTCAGCCAGGAGTTCAAAGTTACGGTGAGCTATGATTGCAC
 CACTGCACACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAAGAAGAAGGAGG
 AGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCA
 GGCAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGAT

31980 AGAAGCCCACTGAAGCCCAACTCAAGGGCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACA
 AAATCGGTACTGTTGACATAATATGGCATGGTCACTGATGCTGAGAGAATGATGTAGAGA
 AAGGGTGGATGAGAATGGAAGCAGGACTAGGCACAGTGGTTCACTTGTAACTTCAGCT
 ACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCA
 ACATAGTGAGACCCTATCTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGC
 [A, G]
 TGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTTCAGCCAGGAGTT
 CAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGA
 CTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGT

FIGURE 3, page 63 of 107

ATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAG
TGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCAC

32156 AGCTACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTG
AGCAACATAGTGAGACCCTATCTCTAAAAAAATTTATTTTAAATTAGCCAAGTGTGGTG
GTGCATGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAG
GAGTTCAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAG
CAAGACTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAG
[T, G]
GGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGC
AGAGTGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAAT
CCACAGCATTGTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGAT
TCCTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTCTTGAGATAGGTA
AGAATGGAGGGTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTG

32161 CTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAA
CATAGTGAGACCCTATCTCTAAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGCA
TGCCATATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAGGAGTT
CAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGA
CTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGT
[A, G]
TGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAGT
GACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACA
GCATTTGCTGATGAAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCCCTA
GGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTCTTGAGATAGGTAAGAAT
GGAGGGTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAG

32436 GAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGA
ATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGA
TTTCTAGTTTGGAGATGGAATCCACAGCATTGCTGATGAAATACATGTTGAAGATGGTA
AGGAAAATAATTAAAAATGATTCTTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGG
TAGCATTCTTGAGATAGGTAAGAATGGAGGGTTTTATTATTTTAAATCAACTATGCT
[A, G]
TTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAATTGGACA
GTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTTCATGGATATA
TGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTATTTTACTTTTAAAGCCATTT
AACTAGTTTTATTAAATTTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTTCACTTA
TCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACACCAGAAA

32490 CAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGG
GTTTGATTTCTAGTTTGGAGATGGAATCCACAGCATTGCTGATGAAATACATGTTGAAG
ATGGTAAGGAAAATAATTAAAAATGATTCTTAGGCTTGTGGACTGAGTAACTTGGGAGGA
TGGTGGTAGCATTCTTGAGATAGGTAAGAATGGAGGGTTTTATTATTTTAAATCAAC
TATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAA
[T, C]
TGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTTCATG
GATATATGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTATTTTACTTTTAAAG
CCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTT
CATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACAC
CAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAAATCAAATCAAGTAAAATAGAAATA

32526 GCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACAGCAT
TTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCTTAGGCT
TGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTCTTGAGATAGGTAAGAATGGAG
GGTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTG
TTAATATCTGAGTGGGAATGTCAATTGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGG
[G, A]
TAGAGCTGGAAATATATATTTCATGGATATATGAATCCATAATGAGAAGGGGTGGCTATAG
CAGTTTTTATTTTACTTTTAAAGCCATTTAACTAGTTTATTAAATGGCGGGCCTTCTT
GAGAGTACAAACCATAAATCACTTCACTTATCTTCAACTCCTACCTTCACTCTTGCCCTG
TGAGGCCAACCTGGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAA
ATCAAATCAAGTAAAATAGAAATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAGTCC

FIGURE 3, page 64 of 107

32893 TTATTTTTACTTTTAAAGCCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGT
ACAAACCATAAATCACTTCATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGC
CAACCTTGGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCATTTAAAAATCAAA
TCAAGTAAAAATAGAAAATAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTT
ACATGAATCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTCAGCCGGGTGAGGT
[A, G]
GCTTGTGCCTGTAATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAG
GAGCTTGAGACCAGCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGC
GTGGTGGTGTGTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGA
ACAAAGTGGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGA
CAGAGCCAGTCCCTGTCCAAAACAAAACAAAACAAAAAACCTGTAATCCCAGCACTCTG

32900 TACTTTTAAAGCCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACC
ATAAATCACTTCATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTT
GGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCATTTAAAAATCAAAATCAAGTA
AAATAGAAAATAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTTACATGAA
TCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTCAGCCGGGTGAGGTAGCTTGT
[G, T]
CCTGTAATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAGGAGCTTG
AGACCAGCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGG
TGTGTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTG
GGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCC
AGTCCCTGTCCAAAACAAAACAAAACAAAAAACCTGTAATCCCAGCACTCTGGGAGGCC

33087 AATAAAAATTGTACTTTTTTTTTTTCAGATATTCAAAAGTCCAGTTTACATGAATCAAAAC
ATCAACCTCTCATCCAATTCAAAGCTCTCTTTCAGCCGGGTGAGGTAGCTTGTGCCTGTA
ATCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAGGAGCTTGAGACCA
GCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGGTGTGTG
CCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTGGGGAGG
[A, G]
CTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCCAGTCCCT
GTCCAAAACAAAACAAAACAAAAAACCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGG
GTACATCACCTGAGGTGGCAGTTCAAGACCTGCCTGGCCAAAATGGTAAACCCCGTCT
CTACTGAAAATACAAAAAATTGGCTGGGCATTGTGGCGGGTGCCTATAATCCCAGATATT
CAGGATGCTGAGGCAGGAGAATTGCTTGAACCCGGGAGGCAGAGTTTATATTGAGCCGAG

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG
GGCATTGTGGCGGGTGCCTATAATCCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, G]
CTCTCCTTTCCCTGTAGGCCAGGCCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGGCCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGTGCTG
TTGTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGCTTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGCTTTCCTCTA

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG
GGCATTGTGGCGGGTGCCTATAATCCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, T, G]
CTCTCCTTTCCCTGTAGGCCAGGCCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGGCCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGTGCTG
TTGTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGCTTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGCTTTCCTCTA

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG
GGCATTGTGGCGGGTGCCTATAATCCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, T, G]
CTCTCCTTTCCCTGTAGGCCAGGCCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGGCCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGTGCTG
TTGTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGCTTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGCTTTCCTCTA

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TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, T, G]

CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGGCCGTGGCTGTTCCCTTTCCCTCCTTGTGCACACTCCTTTCTGCTGGCT
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCGAGGAGAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGACTTTCTCTA

33741 ACAAACGCAACAACAACAAAACAAAATCACAAAGCTCTCCTTTCCCTGTAGGCCAGGCCT
GGCCTGAGACACTGCAGATCAGCCATGGGAAAGGGAAGGCGGGGGCCGTGGCTGTTCCCTT
TTCCCTCCTTGTGCACACTCCTTTCTGCTGGCTTTGCTGCTTTTGGCTCCACCACAGTC
AAGGGGCGAGGAGAAGGTGACTAGAAAGCAAGGGTGTCTTACTTAGCTGGTGTCTTAT
GGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTGCAGGTGTCCAGCTTTTGTGAGTTCTT
[C, G]
GCCACCCTGTGAAGACCCCGAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCT
GGTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT
TCTCAAGTGGATGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTG
ACCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTGTGCTGCCATAT
ATGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAA

34043 CCACCTGTGAAGACCCCGAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTG
GTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT
CTCAAGTGGATGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTGA
CCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTGTGCTGCCATATA
TGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAAC
[G, A]
CTGCGCACCCATGTCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCA
TTCACATGTGTTCTCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATC
TCTCATGCCCTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAG
CTGGGGTTCCAGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTC
TTTCTGCTCCTTCATTTGCCATAGTGTGCAATGCTATGTGTTCTTTCTGCTAAGAAAT

34053 AAGACCCCGAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTGGTCTCTTATG
ACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTTCTCAAGTGGGA
TGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTGACCCCATCCAG
TGCCCTACTTGGCCAGGAGAAACCATTAGGCATCTTGTGCTGCCATATATGGGGAAGC
ACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACC
[C, T]
ATGTCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTACATGTG
TTCTCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCCC
CTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTTCC
AGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTCTTTCTGCTCC
TTCATTTGCCATAGTGTGCAATGCTATGTGTTCTTTCTGCTAAGAAATGCTTTTTCTC

34297 GACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACCCATG
TCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTACATGTGTTT
TCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCCTA
CCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTTCCAGA
TGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTTTCTGCTCCTTC
[A, C]
TTTGCCATAGTGTGCAATGCTATGTGTTCTTTCTGCTAAGAAATGCTTTTTCTCCAGC
GAATTTCTTATATGGCTTAGAGATCATATGCAAGCTCTGCATTGATGGATCCTCAGTCT
TCAGTTTGTAGAGATCTCAGTATAAACCCCAAGACAACAGGAAAGGGCTCACTTAACATT
GCCTTGTAACAGAGAAACCTCTCTTTGAATGAAAGCTGTGAGGGAAGCTCAGTATATAA
AGCAGGTGACATGGTGTCTCCATTGGGGTGGTGGGAACGAGGGGCGGGTGCTCAAGGCT

37209 CAGTGGGGTGGTGAGGAAGGAAGTCTCGCTGAGGAGGCAGCATTGAGCACTGAGAGGGA
GCTACCCTGTAAAGCCCTGGGCAAGACTGTTCCAGGTTGAGGGAACAACACACGTGCAGT
CCCTGAGACTAGAGCTAACTTGGACAAATGAGAAGACCAGTGTGGCTGGGCGGTATTGAG
GGACAGATGGTAGGAGATGAAGGTGGAGAAGTGGGCCATGGCCAGAATTTGGGGATCTAA
GGACAGGAGTTTGGGAGGTTCTCAAGGAGTTGTGGGAACCCCTCTGGGAAGGTTTTTCAGC
[T, C, G]

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TGCAGTGAAGGATCGAATTTACATTTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAA
CAACAATGGCTAATGGGCTGGTTGAGGTGGGAATGAAAGAAGTGGTGAATGAAATCAGG
ATGTATTTGGAAGGGAGAGTTGGCTGGACTGGCTGTGGGTGTGAGGCAGGGTGGAGCCA
TAGACTACTCTGGATTTTCTGTCCAAGCCCTGGATGAATAGCAGTACCATGAATTGAGAT
GCACAAGCCTAGGAGAAGAGGCAGATTTGGGATGTGAATGTGTATGAGTGA AAAACAAAAT

37475 GGAGTTGTGGGAACCCCTCTGGGAAGGTTTTTCAGCGTGCAGTGAAGGATCGAATTTACAT
TTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAAACAACAATGGCTAATGGGCTGGTTGA
GGTGGGAATGAAAGAAGTGGTGAATGAAATCAGGATGTATTTGGAAGGGAGAGTTGGCT
GGACTGGCTGTGGGTGTGAGGCAGGGTGGAGCCATAGACTACTCTGGATTTTCTGTCCA
AGCCCTGGATGAATAGCAGTACCATGAATTGAGATGCACAAGCCTAGGAGAAGAGGCAGA
[G, T]
TTGGGATGTGAATGTGTATGAGTGA AAAACAAAATTTCTCTTTGAATCATGTTCAATGTGC
TACTTGGACAAGCAGCTAATTGGACAACCTAAGTGTAAAAATTAAATAGTGAACAATGAGT
GGAACAAAACGTTAGAGCTGTACATTTTGTCTTTAGAAGGGGCATACTTTTGTCTTAGAA
CGTGTGGCAATCTAATACAAATGGCCAACAAACATATGAAAAATGCTCAACATCACTAA
TGATAAGGGAGATGCAAATCAAACACAAAGCGATACTGCCTTACCCCTGCAAGAAATGG

38476 GGATGGAATTGGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACAT
TGTGTGTTCTTACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGG
ACTTTGGGGACTTGGTGAAAAGGGTGGGGGCGAGTGGGGATAAAAGACAGCAAATTTGGGT
ACAGTGTACACTGCTCGGGTGTATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGC
TTAGTCATGTAAACCAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAA
[A, G]
AACTTGTGGCAATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGA
AACAATGCCAAACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAAGGC
TTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAGATTGCTAAGGTT
CAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAAAAAT
GGAGTAATAATAACCTTGCTTGTAAAGTTATTTTACATTTAAATGAGTTAATGCATG

38486 GGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACATTGTGTGTTCT
TACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGGACTTTGGGGA
CTTGGTGAAAAGGGTGGGGGCGAGTGGGGATAAAAGACAGCAAATTTGGGTACAGTGTACA
CTGCTCGGGTGTATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGCTTAGTCATGT
AACCAAAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAAGAACTTGTGG
[C, T]
AATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGAAACAATGCCA
AACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAAGGCTTGAGAAGCA
TCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCCTGG
CCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAAAAATGGAGTAATAA
TAATACCTTGCTTGTAAGTATTTTACATTTAAATGAGTTAATGCATGTAAAGCACTT

38576 TGCAAAGGCATCCTCATTGGACTTTGGGGACTTGGTGAAAAGGGTGGGGGCGAGTGGGGA
TAAAGACAGCAAATTTGGGTACAGTGTACACTGCTCGGGTGTATGGGTGCACCAAAATTTT
ACAAGTCACCACTAAAGAGCTTAGTCATGTAAACCAACACCACCTCTTCCCCAAAAACCT
ACAGAAATAATAATAAAAAAGAACTTGTGGCAATCTAATTGATGATAATTGATGGTAGCA
TCCATGTTGGGGAAGGAAGGAACCAATGCCAAACACTATGCTAGCTGCTTCACATGTATT
[A, G]
TTTTTACAGGGTGTAAAGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCT
GGAGGCAGATTGCTAAGGTTCAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTT
TGCTTGCTTATCTGTAAAAATGGAGTAATAATAATACCTTGCTTGTAAGTATTTTTTACA
TTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTGCCTGGTATTGTAATAAACAAT
AAATGAGCAATTTTAAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAATAGATGG

38810 GTAGCATCCATGTTGGGGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACA
TGTATTGTTTTTACAGGGTGTAAAGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTAT
GCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTT
TATGCTTTGCTTGCTTATCTGTAAAAATGGAGTAATAATAATACCTTGCTTGTAAGTTAT
TTTTACATTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTGCCTGGTATTGTAAT
[A, G]
AACAAATAAATGAGCAATTTTAAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAAT
AGATGGAAGAGTAGGGCATGTGATAAGGTTTGGCTGTGTTCTCATCCAAATCTCATTG
AATTGTAGCTCCCATAAATTTTACATGTTGTGGGTGGGACCAGGTGGAAGTAAGTGAAT

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CATGGGGGCGGTTCCCCATACTGTTCTCGTGGTAGTGAATAAGTCTCATGAAATCTAAT
GGTTTTATAAGGGGTTTTCCCTTTCACTTGATTCTCATTCTCTCTTGCCTGCTGCCAAGA

38825 GGGGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACATGTATTGTTTTTCAC
AGGGTGTAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAG
ATTGCTAAGGTTCAAGTCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCT
TATCTGTAAAATGGAGTAATAATAATACCTTGCTTGTAAAGTTATTTTACATTTAAATG
AGTTAATGCATGTAAAGCACTTGGAAATAGTGCCTGGTATTGTAATAAACAATAAATGAGC
[A, C]
ATTTTAATGTTACTATTTTTATTTTCTCCGTAGGGTGCACCTCAATAGATGGAAGAGTAGG
GCATGTGATAAGGTTTGGCTGTGTTCTCATCCAAATCTCATTTTGAATTGTAGCTCCCAT
AATTTTCACATGTTGTGGGTGGGACCAGGTGGGAAGTAACGAATCATGGGGGCGGTTCC
CCCATACTGTTCTCGTGGTAGTGAATAAGTCTCATGAAATCTAATGGTTTTATAAGGGGT
TTTCCCTTTCACTTGATTCTCATTCTCTCTTGCCTGCTGCCAAGAAAGACGTGCCTTTCA

39317 CTCGTGGTAGTGAATAAGTCTCATGAAATCTAATGGTTTTATAAGGGGTTTTCCCTTTCA
CTTGATTCTCATTCTCTCTTGCCTGCTGCCAAGAAAGACGTGCCTTTCACCTTCTGCCAT
AATTGTGAGGACTTCCCAGCCACATGGAACTGTGAGTCCATTAAGCCTCTTTTTCTTTAT
AAATTAATTACCCAGTCTCAGGTATGTCTTTATCAGCAGTGTCAAAACAGACTAATACAA
TGTGTTATAACAAGAGTGTTACTTCAGAATCTTGTTTAACTTGTGTATTAGTCAGTGTG
[C, T]
AGGATGCTTGGGTTCTGTCTGGTTTTTGCCATGTTTCCATTTTATGAGCAGTTCCTCTA
TCACAATATAGATGAATGCCCTCTATCACAATATAGATGCAGCAATAAGTTGGGATTGCTG
CATAGCCATCCCAACTTATTGGCATAAAACAAGCATTTTATTATGCTCAGATAATGTGCT
TCAGGGATTATGCAGGACACAGAGGCGATGGTTTGTCTCTATTCTGCAACGTCTGGGGC
CTCACCTGGGAAGATGAGCCTCACCTGGGAAATCTACAGGTGTCTGTGGGGTTAGGGGAG

40519 TGTGCAAGATCCTGTGCTAATGGCTGTGGGAGCATATTGAGATGCCACAAGAAGTTGGCA
TGCTAAAAGGTGAAGACAAATACAGATGGCTTTCAATTAAGTAGTCTCTGGAGAGACAGA
GGCCACTCACAACCTCTAATGATAGTTAAAATAAACTTATTTCAGGCCAGGCACAGTGGC
TCAGGCCATAAATCCAGCACTTTGGGAGGCTGAGGTGGGCGGATCACTTGAGGTACGGA
GTTCTAGACTACCCCGGCCAACATGGCGAAACCCCATCTCTACTAAAAATACAGAAATTA
[A, G]
CCAGGCATGGTGGTGCAGCGCTGTAAATCCAGCTACTTGGGAGGCTGAGGCATGAGAGTC
GCTTGAATCCGGGAGGCAGAGGTTGCAGTGAACCTAAGATGGTGGCACTGCACTCCAGCCT
GGGCCACAGAGTGAGACTCCACCTCAAAAACAAACAAACAAACAAACACTATTTAAAAACA
AGACACAAAGTGAGTTTAAATGCAAACTTATTTAGTTAGCATTGCATTTAATGTTTCAGGAA
CACATGTTCCATTTGTAGACTTCATTAATTACAACCTAGCAGTTATTTAAGTGCTTACTA

41468 TCTTTCTCCCGTGCTGGATGCTTCTGCCCTCCAACATCAGACTCCAAGTTGTTTAGCTT
TTGGACTCTTGGACTTACACCAGTGGTTTGCCAGGGGCTCTCAGACTTTTGGCCACAGTG
CACTGTGCGCTTCCCTACGTTTGAAGTTTGGGACTTGGGCTGTCTTCTTGTCTCTCAG
CTTGCAGATGGCCTATTGTGGGACACCTTGTGATCATGTGAGTCAATACTCCTTAATAAA
TTCCCTTTTCATATGTACATCTATCTATTAGTTCTGTCTTTCTCGAGAGCCCTGACTAAT
[A, T, G]
CAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCCAGTCCCCAGGTGCATGCTCAATG
TGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAATCCAGGTTCTGGATTTTCTTCTTGG
TGTTCTTTCTCTAGACTTGAGGTTTGAATTGTGTTCTGAATCTTTGGGTCTCAAAA
AAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCAAAGCTCATGTGACTCTAGGCCCT
TACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTAAATTATATTGTGTTAACTTAAT

41468 TCTTTCTCCCGTGCTGGATGCTTCTGCCCTCCAACATCAGACTCCAAGTTGTTTAGCTT
TTGGACTCTTGGACTTACACCAGTGGTTTGCCAGGGGCTCTCAGACTTTTGGCCACAGTG
CACTGTGCGCTTCCCTACGTTTGAAGTTTGGGACTTGGGCTGTCTTCTTGTCTCTCAG
CTTGCAGATGGCCTATTGTGGGACACCTTGTGATCATGTGAGTCAATACTCCTTAATAAAA
TTCCCTTTTCATATGTACATCTATCTATTAGTTCTGTCTTTCTCGAGAGCCCTGACTAAT
[A, C, G]
CAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCCAGTCCCCAGGTGCATGCTCAATG
TGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAATCCAGGTTCTGGATTTTCTTCTTGG
TGTTCTTTCTCTAGACTTGAGGTTTGAATTGTGTTCTGAATCTTTGGGTCTCAAAA
AAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCAAAGCTCATGTGACTCTAGGCCCT
TACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTAAATTATATTGTGTTAACTTAAT

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41565 CTCTCAGACTTTTGGCCACAGTGCAGTGTGGCTTCCCTACGTTTGAGTTTTTGGGACTT
GGGCTGTCTTCTTTGCTCCTCAGCTTGCAGATGGCCTATTGTGGGACACCTTGTGATCAT
GTGAGTCAATACTCCTTAATAAAATTCCCTTTCATATGTACATCTATCCTATTAGTTCTGT
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT
[A, C]
CAGGTTCTGGATTTTCTTCTTGGTGTCTTTCCCTCTAGACTTGAGGTTTTGAATTGTGT
CCTGAATCTTTTGGGTCCTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA
AATTATATTGTGTAAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT
TTAATATATTTGTAACATACAAAAACAATATCCAAGAGCAGTATGGAACACCAAAAGGT

41625 GGGCTGTCTTCTTTGCTCCTCAGCTTGCAGATGGCCTATTGTGGGACACCTTGTGATCAT
GTGAGTCAATACTCCTTAATAAAATTCCCTTTCATATGTACATCTATCCTATTAGTTCTGT
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT
CCAGGTTCTGGATTTTCTTCTTGGTGTCTTTCCCTCTAGACTTGAGGTTTTGAATTGTGT
[A, T]
CCTGAATCTTTTGGGTCCTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA
AATTATATTGTGTAAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT
TTAATATATTTGTAACATACAAAAACAATATCCAAGAGCAGTATGGAACACCAAAAGGT
GTTGAGACTTTTTTTTTTGGAGACAGTCTCGCTCTGTCACCAGGCTGGAGTGTGGTGGTGC

41921 GTGTTCTGAATCTTTTGGGTCCTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAG
AAGCAAAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTG
AGGTAAATTATATTGTGTAAACTTAATATATGATACATAGTATAATGCAATACTTAATA
TATATTTAATATATTTGTAACATACAAAAACAATATCCAAGAGCAGTATGGAACACCAA
AAGGTGTTTCAGACTTTTTTTTTTGGAGACAGTCTCGCTCTGTCACCAGGCTGGAGTGTGGT
[G, C, T, A]
GTGCAATCTCAGCTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCTCCTGCCTCAG
CCTCCTGAGTAGCTGGGACTACAGGTGCCACCACCATGCCTGGCTAATTTTTTTTTTGTA
TTTTTGGTAGAGACGGGGTTTACCATTGTTGGCCAGGACGGTCTCGATCTCTTGACCTCG
TGATCCACCTGCCTTGGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCCCTTCTCTCA
AATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTTGTTTAATTCA

42152 GAACACCAAAAGGTGTTTCAGACTTTTTTTTTTGGAGACAGTCTCGCTCTGTACCAGGCTG
GAGTGTGGTGGTGAATCTCAGCTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCT
CCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGTGCCACCACCATGCCTGGCTAATT
TTTTTTGTATTTTGGTAGAGACGGGGTTTACCATTGTTGGCCAGGACGGTCTCGATCT
CTTGACCTCGTGATCCACCTGCCTTGGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCC
[C, A]
CTTCCCTTCAAATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTG
TTTAATTCAATTGAATTTCCACTTAAATGTAACTTTTGAAACCCACACCTCTGACATA
TTCCACATTGCTGTTGGATATTTTGTAGTTTAAAGATTGGCCTGTAAGCTGTATCGGTAT
CATTATTCTAACTTCAGGCTCAAGGTCTCAGTCACTAGTTAAAGTCTTTTCTACCGGCAA
ATCTGTATTACCCTACTGTGGAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCC

42498 AAAGTTTGAATTTTGTTTAATTCAATTGAATTTCCACTTAAATGTAACTTTTGAAACC
CACACCTCTGACATATTCCACATTGCTGTTGGATATTTTAGTTTAAAGATTTGGCCTGT
AAGCTGTATCGGTATCATTATTCTAACTTCAGGCTCAAGGTCTCAGTCACTAGTTAAAGT
CTTTTCTACCGGCAAATCTGTATTACCCTACTGTGGAAGATAACCTCTAAAGTGCCCA
TGTAAGCACAAATCCATAAAACTAAAAGTCAAAGAAAAAGAGAAAGAGTTTATTCCACT
[G, T]
TTTAAAAGTTCAGTTTGATTTAGATCTTATATCTCTTGGGTTTTCTTGACTGATTTTTTA
CATAAATGTGTCCAGAAAGAGTGATCATATCGTGATCTTTGTTCCAGTTTTCTTTTTC
CACATCAAGTTTTCTGATGGAAAGTGATTTAAAAAAACCCTTAAAGTGTGATAATCACT
CTCTTCTTTAGTAGACAGTGGAGTTTAAATAGATGCATACAGCAGTTGTTTACTTGTGATG
AAAAGAAATGTGAATTTTCTGGTGAAGGACATTTCTAGCTCATGTCTAAATTGCAGAGA

42715 GAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCCATAAAACTAAAAGTCAAAGAAA
AAAGAGAAAGAGTTTATTCCACTGTTTAAAGTTTCAAGTTTGAATTTAGATCTTATATCTCT
TGGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGA

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TCTTTGTTCCAGTTTTCCTTTTCCACATCAAGTTTTCCTGATGGAAAGTGATTTAAAAA
AACCCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAATAGATGCA
[T, G, A, C]

ACAGCAGTTGTTTACTTGTGATGAAAAGAAATGTGAATTTTCTGGTGAAGGACATTTC
AGCTCATGTCTAAATTGCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAG
AGGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCT
TCTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTCTGGATTCCAGCCTCTGTTGATT
TTTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACA

42776 AAGAGAAAGAGTTTATTCACCTGTTTAAAGTTTCAGTTTGATTAGATCTTATATCTCTT
GGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGAT
CTTTGTTCCAGTTTTCCTTTTCCACATCAAGTTTTCCTGATGGAAAGTGATTTAAAAA
ACCCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAATAGATGCAT
ACAGCAGTTGTTTACTTGTGATGAAAAGAAATGTGAATTTTCTGGTGAAGGACATTTC
[T, C, A]

GCTCATGTCTAAATTGCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAGA
GGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCTT
CTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTCTGGATTCCAGCCTCTGTTGATT
TTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACAT
GCTGTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTC

43320 GTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTC
TGCAATCTTTGGAGGGTTCTTAGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATT
GTGCTGAAATGGAGACCATTGGGGTAGATGTAGTTCCCTTCATGCCAGTAGCTAATTGG
CTTAGTTTGTCTGATTGTTCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGC
TTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGT
[G, T, C]

CTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAAA
CTCAAGCTAAATTGCAAATTAATACAAAATCATGAAGTGAAGCTTCTCTCCAGAGAAC
TCTTGTAACAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCGTGATTTTAGAGCTGG
ATGCTAGCTGGGCTTATATCCTGGTTCCAGCATTGCTTGGGCAAGTTATTTACAACCT
CTGGTTGAGGTGGTTGGACTAGTTGATATCTATGATTCTTTTTAAGTAAATAACTATTA

43341 TTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTCTGCAATCTTTGGAGGGTTCT
AGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATG
GGGGTAGATGTAGTTCCCTTCATGCCAGTAGCTAATTGGCTTAGTTTGCTGATTGTTC
AGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCA
TGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGA
[A, T]

TTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATT
AATACAAAATCATGAAGTGAAGCTTCTCTCCAGAGAACCTCTTGTAACAGAACTTGAAGG
TGGCAGGATGTCTTGATAGAGCGTGATTTTAGAGCTGGATGCATGCTGGGCTTATATCC
TGGTTCCAGCATTGCTTTGGGCAAGTTATTTACAACCTCTGGTTGAGGTGGTTGGACTA
GTTGATATCTATGATTCTTTTTAAGTAAATAACTATTAGTTTTTTCATACAGTATAATT

43424 GAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATGGGGTAGATGTAGTTCCCTTCAT
GCCAGTAGCTAATTGGCTTAGTTTGTGCTGATTGTTCAGGATATTCCCTAAAAATAGGTG
TCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTG
CTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATT
AGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATTAATACAAAATCATGAAGTGAAGC
[A, G, T]

TCTCTCCAGAGAACCTCTTGTAACAGAACTTGAAGTGGCAGGATGTCTTGATAGAGCG
TGGATTTTAGAGCTGGATGCATGCTGGGCTTATATCCTGGTTCCAGCATTGCTTGGGC
AAGTTATTTACAACCTCTGGTTGAGGTGGTTGGACTAGTTGATATCTATGATTCTTTTT
AAGTAAATAACTATTAGTTTTTTCATACAGTATAATTACTATATAACAAACATCTTCTC
TTTGATTTCATTCATGCATTCAAAGTATTTATTAAATGCCCTCCAATGCCGGACACCATA

43509 CTGATTGTTCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCT
TGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGC
CAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCT
AAATTTGCAAATTAATACAAAATCATGAAGTGAAGCTTCTCTCCAGAGAACCTCTTGTA
CAGAACTTGAAGTGGCAGGATGTCTTGATAGAGCGTGATTTTAGAGCTGGATGCATGC
[A, G, T]

GGGCTTATATCCTGGTTCAGCATTTGCCTTGGGCAAGTTATTTACAACCTCTGGTTGAG
GTGGTTGGACTAGTTGATATCTATGATTCTTTTAAAGTAAATACTATTAGTTTTTTCA
TACAGTATAAATTACTATATAACAAACATCTTCTTTGATTTCATTCATGCATTCAAAG
TATTTATTAAATGCCCTCCAATGCCGGACACCATACTAGGTACTGGGTATATAAGAGTGA
ACCAAATGAGCAGGGTTTCTGCCCTCAGGGAGTTGATAATCTAGTGGGGAAGGTGTTGG

44584 CTTACTCAGGGGAAGGTCAGCCATTTTGTCTATTTCAGGCCTCCAACCGATAGGATGTGG
ACCACCTATGTCGTGGGAGAAATCTGCTTTACTCACTCTGCTAACTTAAATATGAATCCC
ATCAGAAAGCACCTCACAGAAGTACCCAGAATAATGTTTGACCAAATATCTAAGCATCC
TCTGACACAGTCAAGTTGTACATAAAATGAACCTATCCTAGGCTACTTAGAGTAGTCAGA
AGATACCTCTCTGACATGGTAACATTTAAACTGAGACCCAAAGAATGGGAAGGAGCCAGC
[C, T]
GTGGAAGAATGGGGGACAGGCCCTTCAGGCAGAAAGAACTGAGTGGTAACCGAGTGGAA
ACTGAATGGAACTGGAGTCCAGAGGGAAAAGGGGCATGTTGTGAGATGAAATTAGAGAG
GGGACAGAGGCTTTACTGTGACACCTTGAAGCCATGATAAGGGGCTTGCATTTTATTCT
AGATGCAACGATGAGAGGCACTGAGTTTGAGCACCTTGAAGCCATGATAAGGGGCTTGC
ATTTTATTCTAGATGCAGTGATGAGAGGCACTGAAAAGTTTGAGCAAGGAGGAATGTGAG

46250 CCATGATTCAATTACCTCCCCCTGGGTTCTCCCACAACACATGGGAATTCTGGGAGATA
CAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAATCATATCACCCAGTTTAGTACTT
CACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATGGTTGTGCTCCTCCTGTCCCTTAC
CTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTAAATTTGAATTTAGAAAACTTTT
TAAAAAAGTATAAGTATATCCCAAATATTGCATGGGATATACTTACCCTTTAAAAATTTT
[A, C, T, G]
TTGCTATTGTTTTATCTGCAATTCAAATTTTACTGGGTGTCTGTATTTTTTGTTCCTGAA
TCTGGTAGCACACATTGAATTGCACCCTTTAAATGGCTAGAATAGGGAATTTTATGTTA
TGTGCATTGTAACACACACACACACACACACACACACACACACACACATCTGGC
AATTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGG
TTTAGCCACAAGGTCATAAGAAAATCTGACCTCAAAGGAAATTATGTCTGGTGATGGT

46287 ACACATGGGAATTCTGGGAGATACAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAA
TCATATCACCCAGTTTAGTACTTCACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATG
GTTGTGCTCCTCCTGTCCCTTACCTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTA
AATTTGAATTTAGAAAACTTTTAAAAAAGTATAAGTATATCCCAAATATTGCATGGGA
TATACTTACCCTTTAAAAATTTTATTGCTATTGTTTATCTGCAATTCAAATTTTACTGGG
[C, T]
GTCTGTATTTTTTGTTCCTGAATCTGGTAGCACACATTGAATTGCACCCTTTAAAAATGG
CTAGAATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACAC
ACACACACACACACGATCTGGCAATCTCCTTAACTAACTACCATGTAGAAGCTACC
ATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAA
AGGAAATTATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGC

46566 TGCAATTCAAATTTTACTGGGTGTCTGTATTTTTTGTTCCTGAATCTGGTAGCACACAT
TGAATTGCACCCTTTAAATGGCTAGAATAGGGAATTTTATGTTATGTGCATTGTAACAC
ACACACACACACACACACACACACACACACACACACATCTGGCAATCTCCTTAACT
AACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGT
CAATAAGAAAATCTGACCTCAAAGGAAATTATGTCTGGTGATGGTTAATGCTTCTACTAA
[A, C, T, G]
TTCCCTTAGAGCATAGGATGCTGAGCCCATAGTAGGACCTCATCAAATGCTGTTTGTATA
GAAATTGCATTTGGGGAATTTAGCAGCTGTTGATAACTGAATGGAAAGAAATGAATAC
CCTGGTACCTGTGGTACAACCTAAAGAACACCATGAAATGGGCCTCATGGGAGGTTCTCA
ATGAATTCAGTGGCGTGGCACTTTTGGGCATGCTTTTGAACCAAGTACTTACTCCATGT
GCCTGTGAGTTTGGCACCTCTCATGCGAGCCCAAGTGCAACTGGTTTCTGAGGGGCCATT

46653 ATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACACACACAC
CACACACACGATCTGGCAATTTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCG
ATGCAGTCTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAAAGGAA
ATTATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGCTGAGC
CCATAGTAGGACCTCATCAAATGCTGTTTGTATAGAAATTGCATTTGGGGAAAATTAGCA
[G, A]
CTGTTGATAACTGAATGGAAAGAAATGAACCTACCCTGGTACCTGTGGTACAACCTTAAAGA
ACACCATGAAATGGGCCTCATGGGAGGTTCTCAATGAATTCAGTGGCGTGGCACTTTTGG
GCATGCTTTTGAACCAAGTACTTACTCCATGTGCCTGTGAGTTTGGCACCTCTCATGGC

FIGURE 3, page 71 of 107

AGCCCAAGTGCAACTGGTTTCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACTCT
CAGACATGCCTGCAAATTCCAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTAT

47153 TCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACTCTCAGACATGCCTGCAAATTC
CAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTG
TTTCTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTC
TTCAGAGGCAATTTCCAAGCAATTAAGTATGGGTTGAATCCAAAGTGTATTGATGAATTA
AATTCTGTTTCCTTGGCTGAAGATTCTGTTTCCTTGGCTGACACCTGAACTCAAAGGTTAGA
[T, A]
TGAATCTCTAGGAAAACGGTTTTTCTCTTGTGTTTTCTGTCAGGCTTTGCTGTTTACGA
AGATCTTGCATCAACACTTAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCAT
TCCACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGA
TTTTCGAATAGTGTCCACAATTTTATAACTGGGGAGTTCCTTGAATGGAAATATGTTCA
CAGTGGCTGCTTAATTGTGACTAACCCTACATAGAGACTGCTTTGGTAATAGATTGA

47171 ATCTCCCAATGGCAGACAACTCTCAGACATGCCTGCAAATTCGAAGACAGCCAGGCTGAT
CATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTTCTCCTCCTTTCTGTG
AGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTCAGAGGCAATTTCCAA
GCAATTAAGTATGGGTTGAATCCAAAGTGTATTGATGAATTAATCTGTTTCCTTGGCTG
AAGATTCTGTTTCCTTGGCTGACACCTGAACTCAAAGGTTAGATTGAACTATCTAGGAAAA
[C, T]
GGTTTTTCTCTTGTGTTTTTCTGTCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACT
TAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGA
ACTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTTTGAATAGTGCCCCA
CAATTTTATAACTGGGGAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGT
GACTAACCCTACATAGAGACTGCTTTGGTAATAGATTGATTCTGAGGGTCTAGGAGA

47216 GACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTT
CTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTC
AGAGGCAATTTCCAAGCAATTAAGTATGGGTTGAATCCAAAGTGTATTGATGAATTAAT
TCTGTTTCCTTGGCTGAAGATTCTGTTTCCTTGGCTGACACCTGAACTCAAAGGTTAGATTG
AACTATCTAGGAAAACGGTTTTTCTCTTGTGTTTTCTGTCAGGCTTTGCTGTTTACGAAG
[A, T]
TCTTGCATCAACACTTAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCC
ACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTT
TCGAATAGTGTCCACAATTTTATAACTGGGGAGTTCCTTGAATGGAAATATGTTTACAG
TGGCTGCTTAATTGTGACTAACCCTACATAGAGACTGCTTTGGTAATAGATTGATTCT
TGAGGGTCTAGGAGAAGGGACACTTCTCATATGGGGAAGACGGGATTAATCCTTGAAAAAT

47484 GTGTTTTCTGTCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACTTAGCATTCACTC
ACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGAACCTCTACTATGT
GCCAGCATTCAATATCCAATTTGTCTTAGATTTTGAATAGTGTCCACAATTTTATAAC
TGGGGAGTTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCTAC
ACATAGAGACTGCTTTGGTAATAGATTGATTCTGAGGGTCTAGGAGAAGGGACACTTCT
[T, C]
ATATGGGGAAGACGGGATTAATCCTTGAAAATGATACTGAAGCCAACCTTCTGTACCAGTA
TAGCAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGTCTCTGAGATTTT
GGGTGCCTTCTCTAGCCCCTGAGTGTGGGCTTCTTCTGAATTCATAGGGGTGGAGGTG
AAGGTACGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATC
ACCTTGGTGCCTCCGATGCCTGAAGCACAAATAGGCCCTCAGCAAACATTTGTTGAATTCA

47668 GAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCTACATC
AGAGACTGCTTTGGTAATAGATTGATTCTGAGGGTCTAGGAGAAGGGACACTTCTCATA
TGGGGAAGACGGGATTAATCCTTGAAAATGATACTGAAGCCAACCTTCTGTACCAGTATAG
CAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGTCTCTGAGATTTTGGG
TGCTTCTCTAGCCCCTGAGTGTGGGCTTCTTCTGAATTCATAGGGGTGGAGGTGAAG
[G, A]
TACCGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATCACCT
TGGTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAAACATTTGTTGAATTCATGCC
ATGAACATTAATCGAGCCCTTTTTTATACACTGTGCACTGGGATTGGGACCATGGAAAATT
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACCTATCCTCTAGCAGGAGA
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGAGGTGTTGGTCTAGCTGGCAGG

47698 GGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGATTCT
GAGGGTCTAGGAGAAGGGACACTTCTCATATGGGAAGACGGGATTAATCCTTGAAAATG
ATACTGAAGCCAACTTCTGTACCACTATAGCAGCTTAGCAGACTTATATGATCCATGT
AAGGGTCTGTTTGTCTCTGAGATTTTGGGTGCCTTCTCTAGCCCTGAGTGTGGGCTT
CTTCTGAATTCATAGGGGTGGAGGTGAAGGTACCGCCAGCTCTCACCCAACATCCAT
[C, T]
CCTGGACAGCAGGGATTCTGCTCATCACCTTGGTGCCTCCGATGCCTGAAGCACAAATAGG
CCCTCAGCAAACATTTGTTGAATTCATGCCATGAACATTAATCGAGCCCTTTTTATACAC
TGTGCACTGGGATTGGGACCATGGAAAATTTAGAGAGGAAAAGGTCCACCTTCAAGGGGC
ATCTAGAGGAACTTATCCTCTAGCAGGAGAAAATTGCTAATGAGAAAAGGTATTTTGGGGA
GTGGAGTGAGGTGTTGGTCTAGCTGGCAGGTTACGCTATGCTCAGTGGCTCTCTGGTAT

48029 TGGTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAAACATTTGTTGAATTCATGCC
ATGAACATTAATCGAGCCCTTTTTATACACTGTGCACTGGGATTGGGACCATGGAAAAT
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACTTATCCTCTAGCAGGAGA
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGGGTGTTGGTCTAGCTGGCAGG
TTCAGCCTATGCTCAGTGGCTCTCTGGTATGGAATTCCTCAGAAATGTTGATTACGCCA
[A, T]
AGATTTCTCTGGCAGCACTGACTCTTGCCCTTCCCTCGGCCACATTTTATCCCCAAACCT
AGGTGTTACTGGGAAGAGACTGAGCTGTTTTATTGAAGATAATTGACTTTCCAGTTTTT
AAGTAAGTCTGTTGATTCTCGAAGACTTCACTAATCAGAGTTATGAATATTTCAAAAAC
ACTTCCAGTCTTCAGATGAATGGATTTGTAGGTTTTCTACATTGCTGTCTCCCTAGCCC
CATGAGGAATAATGTGGGTATCCTTTTCCCTTTTAGGTTTCTCTCTTCTCTAACCTGCC

49334 TGAGGCTGCCTGGTTTCTGTAGCAGTGTTTACGAGCCTGTGACTCTGAGCAGAGAGAAGG
AATATTATACAGGATATTTCCAGGTAGCTCCAGGAAAAGACAAAAGGGGAGGAAGTTGA
GTCTGTTAGCTAAAGAGCAGTGTTGAATATGGGATCCAAGTTGGGTGGAGAAGAGAAAGA
GAACACAGGGAGGGTAGGATGACAGGAGAAAGTAGAGGCAGGGTATGATGTGGGAGCGAT
GAGGGTAGCAAGCTGGAAAGAGAGGATGATCTAGTCAATGTCTTAGTGTGCCTTAGGGCT
[A, G]
CTATAATGAAATACCATAGACTGAGTAGCTTTTGACAAACAGAAATTTATTTCTCATGGT
TCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTGAGTGTCTGGCAAGGATCTGGTA
CCTGATTGACAGACAGCTGTCTTCTGCTGTGTCTCACTCGGTGGAAGGACCAAGAGAT
CTCTCTGGGTTCTCTTTTATAAGGGCATGAATCCAATTCATGAGGGCTCAGCCCTCACCA
TCTAATCACCCCCCAAAGCCCCCACCTCCTAATCCCATCACATTGAGGGTTAGATTTAG

49680 TTTATTTCTCATGGTTCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTGAGTGTCT
GGCAAGGATCTGGTACCTGATTGACAGACAGCTGTCTTCTGCTGTGTCTCACTCGGTG
GAAGGACCAAGAGATCTCTCTGGGTTCTCTTTTATAAGGGCATGAATCCAATTCATGAGG
GCTCAGCCCTCACCATCTAATCACCCCCCAAAGCCCCCACCTCCTAATCCCATCACATTG
AGGGTTAGATTTGAGTGTGTGAATTTTGGGGGACAAAAATTCAGACCGTAGCAGTAAT
[C, G]
GCTTCAACTGAGTATTGAGACAGTTCTTGTGGTAACAAGGTTTAGGGTGTGGCCATAGGG
AGACTCAGCTGTAGTGGAGCTGTTGGGGCTGTGCCAAGGTACCCAGATCCGTTTTGTTC
TGTGCACCTGTCTTTAGCTTCTGGGGGCTTCTCTCTTCTGGCCTGTACCTACAGCCTT
TTTCAGAGGACTCTCCTTGGTCTACCGAGCCTATTTTCAGGATGTTCTTAGGAGTTTTT
TGAGATGGAGTCTCCCTCTGTGCGCCAGGCTGGAGTGCAGCGGCACAACTCAGTCACT

50056 GGAGCTGTTGGGGCTGTGCCAAGGTACCCAGATCCGTTTTGTTCTGTGCACCTGTCTCT
TAGCTTCTGGGGCTTCTCTCTTTCTGGCCTGTACCTACAGCCTTTTTCAGAGGACTCTC
CTTGGTCTACCGGAGCCTATTTTCAGGATGTTCTTAGGAGTTTTTTGAGATGGAGTCTCC
CTCTGTGCGCCAGGCTGGAGTGCAGCGGCACAATCTCAGTCACTCCAACCTCCACCTCC
TAGGTTCAAGCCATTCTCCAGCCTCAGCCTCCCAAGTAGCTTAGATTACAAGCATGCACC
[A, G]
CTATGCCTGGCTAATTTTTTTTTTTTTTTTTTTTTTTTGTATTTTTAGCAGAGCTGGGACT
TCGCCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAGGTGATCCCCTGCCTCGGCC
TCACAAAGTGCTGGGATGACAAGCATGAGCCACTGCGCCTGGCCATCCTAGGAGTTTGTA
TCACCCACTCCTTCACGGTTTGTCTGGAGGGATCTCTAAATAAATAACTCACAAACAAA
TTCTCATCCGGGATCTGCTTCTGGGATACCTGCCCTGAGTTAGTGGTTGAGATGGAATGG

51020 AGGGGCCCTGAAGAGGCTGGGGGCATGAGGGAGTCTTCAGATCTTCAGCAGGGGGCCCTG
AGGCATCTTTGGAATGGTTTGGGGTAGGGGTGAGGGGAAGGTTGGATCAGAGGGGAGGAG
GCTGAGAGCAGAAGAGAGAAACAAAGTACACCAAGTGGCCTCACTGGCCTCACACTTCTC

FIGURE 3, page 73 of 107

AGAATTGGTCCCTTCAGACCCGGTGGTGGGTGGCTTGGCAGCCTGGATGTGGGGTGTGGA
GATTGGTACTACTCCTGGCACACAGGGGGCATGCATTGGTTGAATAAAACAAATGAATGAC
[A, T, G, C]

CATCAAGTTTGTAGATGCCCCACCTTTTCATCATTCTGAACCATTGTCACTTCCATGTAT
TTTATGGTCTGATAAATATGGAATTAATCGAAGTACCTCTAGCTATTTGTTATCACCATT
ATTGGGTGGGACACAGCGAACAGATTCTTAAAGCTAGGGAATTATGCAATAGGACATGT
TACGGACTTAAGCCATAAGATCCTTTTTTTTTTTTTTTTTTTTTTTTTTTTAGATAGA
GTCTCACTCTGTCACCCAGGCTAAAGTGCAGTGGTGAATGTCGACTCACTGCAACCTCC

53750 ATGTCTTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTG
CTTGCATAGAACCGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTG
AGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCC
AATAGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACT
GTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGAAGACAGA
[G, T, C]

CTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAAC
CCTGATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTT
TTTTTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAAAATCAGGGGAA
ACTGTGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACC
CCTTGTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCTCA

53753 TCTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTGCTT
GCATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTGAGG
ACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCCAAT
AGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACTGTC
TTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGAAGACAGACCT
[A, T, C, G]

TGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAACCTT
GATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTT
TTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAAAATCAGGGGAACT
GTCGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCT
TGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCTAAAT

53799 TGTGTCATTGCTTGCATAGAACCGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCT
CACGTTGATTGAGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGT
TAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGGCTTG
GAGAAGGGACTGCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCG
TGGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCT
[C, A, T]

CTTCTCTAACCTGATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTG
ACTTTTTTTTTTTTTTTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAA
AATCAGGGGAACTGTGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTC
TCAATGTGAACCCCTTGTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTT
TTGGGTCTCTAAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAGGC

53917 GTTAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTCCAGGGAGGAGGAAGGAGCT
TGGAGAAGGGACTGTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCAT
CGTGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCC
CTTCTTCTCTAACCTGATAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTT
CTGACTTTTTTTTTTTTTTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGG
[C, T, G]

AAAATCAGGGGAACTGTGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAG
TCTCATGTGAACCCCTTGTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTC
TTTTGGGTCTCTAAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAG
GCAGACTCAGGGTAAATCTGCCTGTCTTCCACCAGAGAGGGGACTCACCAGTGTGACT
CATGCCATTCAATAGAATTTTAAATCTCACAGTATTTTGTACCCCTGAGTAAAGAG

54056 GTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAACCTGTA
TAACCTTGTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTTTT
TGCCATACCTTTGGTTTATAAATACAAGAAGAGATTGGGGGAAAATCAGGGGAACTGT
CGAGCTTACAAGTCCCGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCTTG
TTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCTAAATCA
[C, T]

AGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCAGGAAGGCAGACTCAGGGTAAATTC
TGCCCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATGCCATTCAATAGAATT
TTTAAATCTCACAGTATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATG
AAGGAACAAGAAAGGCCGAAGTGAAGTGTGGAGCCAGTGAAGTAAATACTGCCCTG
TCTCTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACTCTCTTGGACTGTTT

54402 ACTCAGGGTAAATTCGCCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATG
CCATTCAATAGAATTTTTAAATCTCACAGTATTTTGTACCCCTGAGTAAAAGAGAGGC
TTGTAGCTCTTCATGAAGGAACAAGAAAGGCCGAAGTGAAGTGTGGAGCCAGTGAAG
TAAATACTGCCCTGTCTCTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACT
CTCTTGGACTGTTTGTCTTTTGAAGATGTTAACACCTTGACTCTGGATTTCTGCCTATG
[G, A]
GAAAAAACACAATAGTGCCAGGGGTGCTTCCATATGCAGGATTAAGTCTGCAGTCAAAG
TTTCTGTTGGGCAGGTGTGTGAAGTGTGATATCATAAATGCTGGCCCAAAGCAAATGGGAG
AATGGATGAATGAACAAATTCAGGAATGAAACAACTGTAACAGGGGTCTCCTAGTTGT
AGGTTCTCTGCTAACTTCATATTGAGACACAAAGGAAGGGCATCTTATAATATAATGTT
GGGGATGAGCAGTCAGCTTGAGGTGGGGACAGTAAGGTGGGTTTGTGTTTGAAG

54493 TATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATGAAGGAACAAGAAAGGC
CCGAAGTGAAGTGTGGAGCCAGTGAAGTAAATACTGCCCTGTCTTGTCTGTCCAC
TCTAGCGCTTGTACAAACCATGAAGAACTCTCTTGGACTGTTTGTCTTTTGAAGATGTT
AACACCTTGACTCTGGATTTCTGCCTATGGGAAAAAACACAATAGTGCCAGGGGTGCTT
CCATATGCAGGATTAAGTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAAGTGAAG
[G, A, T]
CATAAATGCTGGCCCAAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAAA
CAAAGTGAACAGGGGTCTCCTAGTTGTAGGTTCTCTGCTAACTTCATATTGAGACAC
AAAGGAAGGGCATCTTATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGA
CACGTAAGGTGGGTTTGTGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGA
GAAGAATCTGGGAAGTGAGACCTGTTTCTCTGGGACAGGTGTGAGCGGGTCTGGGTGCTG

54749 CTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAAGTGTGATATCATAAATGCTGGCC
AAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAACAACTGTAACAGG
GGTCTCCTAGTTGTAGGTTCTCTGCTAACTTCATATTGAGACACAAAGGAAGGGCATCT
TATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGGACACGTAAGGTGGGTT
TTGATGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGAGAAGAATCTGGGAAG
[T, C]
GAGACCTGTTTCTCTGGGACAGGTGTGAGCGGGTCTGGGTGCTGCTGGGTTTGGCTGGGG
CAAAGGTTGCTTGTGGGGGCGTGGCAGTGGGTGAGGCCTGTGAGATAGGCAGGCGCCAGG
TCCTGGAAGGGAGAGTCAGGGAGCAAGGCATGGAGCCTGCACCTTACTCTGAATGTTGGT
GGCGCCTTCAGAGCATGTTAGCAGGGGTCCATGTGATCACACTGACACCTGAGAGAGTG
ACACACCATGTACATGGCTGGTATATGGAGGATGGATTAAAGGGGGACAGGACTGAAGGC

55396 GACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCA
GTCTGCCTTGTCTTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTT
GATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTTGAAGACAGCAGGGAGCAATGCTTCA
CCCAAGGGGAGAGCCTCGGGTGGCGTTTGGGACCATGGCTTGTCTCTTAGTGCATACA
GACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGT
[-, C]
CATGGAAACAGGGAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAG
ATACTGCTCTAAGAGCTGCTGGGACAACTGGAGGCCGCTGTGGGTGGAGCACCCGAGGTG
GAATCCTGCGCTCCTCATCTTCTGCCCTCTTCTAACACCCCTCCCTCCCCAGCGGCCT
GAAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACTGGGACTCTTGGAAAGCTCTGAG
CCATCAGTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTGGCT

55397 ACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCAG
TCTGCCCTGTTTTCTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTTG
ATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTTGAAGACAGCAGGGAGCAATGCTTCA
CCAAAGGGGAGAGCCTCGGGTGGCGTTTGGGACCATGGCTTGTCTCTTAGTGCATACAG
ACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGT
[-, C]
ATGGAAACAGGGAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAGA
TACTGCTCTAAGAGCTGCTGGGACAACTGGAGGCCGCTGTGGGTGGAGCACCCGAGGTGG
AATCCTGCGCTCCTCATCTTCTGCCCTCTTCTAACACCCCTCCCTCCCCAGCGGCCTG

FIGURE 3, page 75 of 107

AAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGC
CATCAGTGCAGGTGGCCCCGGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTG

55703 AACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAGATACTG
CTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCC
TGCGCTCCTCATCTTTCCTGCCCTCTTCTAACACCCTCCCTCCCCAGCGGCTGAAGTC
TGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCA
GTGCAGGTGGCCCCGGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTGCGGGG
[A, C]
GGGGGGAGGTGAGAGGAGGCTGTCTTTCCTCTTGCCCGGAGTCTGCAGTCACAGTTG
CACTTTGCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCT
GCATTTGAGGTTTCCAAGAGACTCTGAACCCTTGAATGCCATTTGTTTCAGGTGACATG
GAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCAAGGATGCCCCCTGCTTGT
TAGCTTGTCTAGGTTGCTCAGTGTCCCCTCTCTGGCCCGTAGTTTCTCTCATCTATCAAT

55783 ACTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCCTG
CCCTCTTCTAACACCCTCCCTCCCCAGCGGCTGAAGTCTGCCTATGCCTATGCAGGCT
GAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGGAATG
ATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTGCGGGCGGGGGAGGTGAGAGGAGG
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[G, A]
CAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCTGCATTTGAGGTTTCCAAGAG
ACTCTGAACCCTTGAATGCCATTTGTTTCAGGTGACATGGAGGAATGGAGGCACTCGGG
TTAAGTGTCTGAAGATGGATTCAAGGATGCCCCCTGCTTGTAGCTTGTCTATAGGTTGCTC
AGTGTCCCCTCTCTGGCCCGTAGTTTCTCTCATCTATCAATGGGGGCAGATAATAATCATC
ACCTTACACAGAAGGTTTGGCGAAGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTC

55806 CACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCCTGCCCTCTTCTAACACCCTCCCTC
CCCAGCGGCCCTGAAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTG
GAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGGAATGATTCCAGACCTAGAGTAGGGGTG
GGAGGTGCGCTGCGGGCGGGGGAGGTGAGAGGAGGCTGTCTTTCCTCTTGCCCGGG
AGTCTGCAGTCACAGTTGCATTTGCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGAC
[A, C]
GTGGCACTGAGGCAGCTGCATTTGAGGTTTCCAAGAGACTCTGAACCCTTGAATGCCAT
TTGTTTCAGGTGACATGGAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCA
AGGATGCCCCCTGCTTGTGTAGCTTGTCTAGGTTGCTCAGTGTCCCCTCTCTGGCCCGTAG
TTTCCTCATCTATCAATGGGGGCAGATAATAATCATCACCTTACACAGAAGGTTTGGCGA
AGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTCATACTTGTAAATCCAGCACTTTA

57433 GAAGTAGTCAATCTCATAGACTGGAAAATATTTTAAATGCCTATTTGAAACAAATGTCGT
TCCTATTTTTTGGGATAAAAGGGCCCTTTCCCCCTGGAATTGCTATGTTTCCTCTTTTCC
TGTTCTACACTCTGCAGAACTGACTTTGAAGTCAGATGATTCCCTTTTAAATCTGGCTT
CTCGCTTTTGGGCGCTTAACTTGACTTAGCCATTGAACCTGTCTGGGTCTCAGTTTCT
TTGTCTGTGAAGTGGGGCTGTGTTGGGCATGAGCATGCGCCTACAGGCCTCTAACTGGAG
[G, T]
GGGTGTTGGTGATCAGGGCCCTGGCTGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGC
GGGTACGTTGCTCCCGGGCTGCTCCAGCCAGTGTCTGTGCGCAGCAAGGATACACGGC
AGGATTGTTTCTGGGAGACACAGGACTCCTCAGACAGCTAACTTCACTCAAGAACTCCT
TGATGGGCTTGCTAAACTTCTTAGGCTGGAAGATGCTTACCTCCTCCTTCTTCTTTCC
TTCTTTTCCAGGGTCAGACTTACTTAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTC

57699 GCATGAGCATGCGCCTACAGGCCTCTAACTGGAGGGGGTGTGGTGATCAGGGCCCTGGC
TGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGCGGGTACGTTGCTCCCGGGCTGCTCC
CAGCCAGTGTCTGTGCGCAGCAAGGATACACGGCAGGATTGTTTCTGGGAGACACAGGA
CTCCTCAGACAGCTAACTTCAAGTCAAGAACTCCTTGATGGGCTTGCTAAACTTCTTAG
GCTGGAAGATGCTTACCTCCTCCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT
[T, A]
TAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTCCCTATCATTTTCTCTCACACATGCGT
TCCCCCTAATAAAATCCATGCACATTTAATCCCTTCTTGGCATCTGCTTCTGGGGTCTCT
ACCTGGACTCATGAGTGTGATAATTCCTTGTAGTGAGGACCGAATGTAGTGATGTAAGC
AGAGTGTGTTGTCAGAGTGACAGCATGAGTAAGTGCCAGTAGGCCATCAGGGCTCCTGTC
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60173 TTAATGGACTCACAGTTCCATATGGCTAGGGAGGCCTCACAATCATGGTGGAGGGTAAAT
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[C, G, A, T]
TGAACCTAATGGAGGGCAGATTTCATTTCCTGGGGCTTCCGTAGCAAATTGCCACACATGTA
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GAGGATCCTTCCCTTGCCCTTTCCAGCTTCTAGAGGGACCACATTCTGGGCTCATGGCT
GCATCACTCCAACCTGTGTATCTGTCTCACATCCCTTCTCTCTGCCCCCTCCTGCTTC

62216 CACATTGTTTTCAACAAGGAAGCTAAGGGAGGAGGTGAATTATAAATGGCAGAGAGATAGC
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[C, A]
TCTCTTCTTCTTTGTCCCCACCCTGACTCCTCAGTGGCCGTTCCTCGCAGCAGCACCCGT
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GCGCTGTCCATTTCTCCGAGCCACAGTGGTAGCCAGGATGGAAGGCACCTCCCAAGG
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CTACCTTGTCACTGGCGGTCTTGTCTTCCGGGCATTGGAGCAGCCCTTTGAGAGCAGCCA

62830 GCCTTGAGAAGGCGGAATTCCTGCGGGATCATGTCTGTGTGAGCCCCAGGAGCTGGAG
ACGTTGATCCAGGTGAGCAGGGAGTGAGTCCATCTTAGGCCAGCTGGTGGGGTGGATGGC
AGTGTGGTTTTATCTTCTGGGTCTCTAGTCTTGCTTCAGTTGAGAGGCTCTTGGTGG
TCAGGGAAGTTCTCTCCAGGGAGGTGACATGTGAGCTGAGACCTCCAAGAAGCGATAGTG
AGGCATGTGACAGTGTGGGGGAAGGAGGGTCCATGTTCTGCATCTGGTTTTGGATGAGTG
[G, C]
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63395 GGATGAAATAATATGGATCACAGTAGTAGTAATCATCAGGTTTGCTGTTTTTGAATACTT
ACTGTGTATCAGGCACTGTACTAAGGCCTTTACATACCCTGGATATTAAGGAAAAAAGAT
TCTTAGGAAAATGGAAGCAGAGAACTTGAAGTGCAGCCTAAAGAAGCAAGGCAACACTTC
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CAGAGAGTCATCTGTGGGGCTGCGGTGCGAGGGACTGGATCAGGAGGGTTGTGAAGTCTG
[G, A]
GAAGCCAGAGAGAAAAAGCAGTTCCCACGAGGAAGAAAGGGAATGGTGGAGAGCCCTGTT
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CTATCCCAGACACCCCTCCTGAAGTACAAAGAGTGGGTTTTGGTGAAGGCGGTGACATTT
ATGGAGGTGAGGGAGAGTCTCATCTTTCTGGGGCTCTAAAGTTTGAAGGTGGAGGGAT
GGAAAGACAGCTTTTACAATTCCCTTGGCTCTGGAAGATGCACATTAAATTCTAATGG

64019 GGATTTACCAGTCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAG
GGGAATTCTGATGCTGCTTATGATCTGGCACCTTCATAGCAATCATATTCTTGTCACTTA
GTTTAAATAATGACTTGACTCTTAAATAAATAGAAATACAAATTCTTCCCTTCTGGGAG
TAAATATGATTTATAGCTATGCCCTATAATTCTTCTCAAAAAAATAAAATGTTAAAAAT
CCAAGGGCAGCATTTATATAAGTGTTCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCT
[T, -]
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CAGTGGTGTGATCATGGCTCATTGCAGGTTCAACTTCCTGATCGAGGTATCAGCTGATCC
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TTTTGCATTTTTTTGTAGAGACAGGTTTTACCATGTTGCCAGGCTGGTCTTGAATTCC
TAGGCTCAAGCAATCAACCCGCTTGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTC

64030 TCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAGGGGAATTCTGA
TGCTGCTTATGATCTGGCACCTTCATAGCAATCATATTCTTGTCACTTAGTTTTAAATAAT
GACTTGACTCTTAAATAAATAGAAATACAAATTCTTCCCTTCTGGGAGTAAATATGATT

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[T, -]
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AATCAACCCGCCTTGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCAT

64104 TGGCACCTTCATAGCAATCATATTCTGTGCTAGTTAGTTTTAATAATGACTTGACTCTTAA
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[C, A, G, T]
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GGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTT
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64166 AAATAGAAATACAAATTCTTCCCTTCCTGGGAGTAAATATGATTTTCATAGCTATGCCCTA
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[G, T]
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TGGGAAATGCTACCACATTTGTGGTGTGAGATTTTGTACTAATCAGTGCCAGATTTA
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64408 TTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCTGGG
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[A, G]
GCCTAGCATGCTATAGAGAATGGAATAAACAATTCTGGAGTAGTTTAAAGTAGGAGTATA
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ACGTCATAATAACCTGATAGGCGTTCTGAAGTGAATCTAGTATTGTGTTGAATTTTCTT
TCATTAGGCAGTAAGATCTTGAAGAAAAGGAATGCACTGTGTTACCTTTTCTCCACATG
TGACCTATGCTTTGCTTTGCCTCTAATTATTGCCATTAGATAAATGTTTTTAGAGCAAG

64786 TGTGTGATATGAGGTAGGATCCTTTTTAATTAGTTGTAAGACACGTCATAATAACCTGA
TAGGCGTTCTGAAGTGAATCTAGTATTGTGTTGAATTTCTTCATTAGGCAGTAAGAT
CTTGAAGAAAAGGAATGCACTGTGTTACCTTTTCTCCACATGTGACCTATGCTTTGCTT
TGCCCTAATTATTGCCATTAGATAAATGTTTTTAGAGCAAGATATCAAAGCAAATTGT
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[C, T]
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AAGGACAGGGTCAGAGAGCGTGGAGGTCCTTATTCTGATGCTGCCATTAAGACTGGTGTG
CTGTTTTGACCTCAAAGATTTCTCTGTGAAATGAGATATGTGTGTGTATGTGTGCGTTT
TGTGAATGTGTTTGCACATACACAGTGTGTGCATTTAAGATAATTTTATAACAATTTAA
AAAGCTGCTCTTTATTAGGCATCTGTTATGAGCTGGGCATCATATACCCATTATCTCATT

65120 TTATGAGAGAGCTCAGAGACCTGAATGAAGACAGGGTCAGAGAGCGTGGAGGTCCTTAT
TCTGATGCTGCCATTAAGACTGGTGTCTGTTTGGACCTCAAAGATTTCTCTGTGAATG
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TGGGCATCATATACCCATTATCTCATTTAATCTTATCAACAACACTCTAAGTTTCATATCA
[A, G, C]

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 AAACCTTGCTTTTATGTTGAATGCTGTATTAGTCCATTCTCACTATAAAGAACTATCTGA
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65703 GTTCCGCAGGCTGTGCAGGAAGCATGGCTTGGGAGGCTTCAGGAACTTACAATCATGGC
 AGAAGACGAAGGGGAGGCAGGCATGTCTATATGGCTGGAGCAGGAGGAAGAGAGAGCAA
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 [C, T]
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 [C, G]
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66951 TGTAGCGATCACAAGAAACACAGTATTTAAAAATAGTCTGTTTTTCACATCTGGAAGGGT
 TTCAGTGTGCTGTGTTTTAAGTTGGAAGATAGTACTATTGTATCTCACCCAAGTCTGAA
 AGGAGTGAAGAGTAGAAAGTAGATGGAAAGTATTTATTTTCATCATGTCTCTTGGCT
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 [T, G]
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 GCTGTTATGAAGGGGACATTCTCATCCATTCAATTTAGTCATTCACTCATCTATCCATCCA
 TCCACTTGTCTCAGAATTGCTGTGAACCTCCTGCATGTATCAGGTAACATGCCAGGTGT
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68094 GAGACATTTTTGGTTGTTACAGCTGGGGAGGTGCTATAGACATCTAGTGGGTAGAGGCCA
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 [G, A]
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 ATGGCTTAAGTTACCTGGTTAGAAATGGAGGATCCAGGGTTTACTGCCAGGCAGTCTGA
 CCACATATCCCAGGCTCTGAACCACCATGCACTGGAACAGAAACACGATATCTGGGAGGG
 ATTCATTGGGTAGGCCATGGTTGGAGGGTATCCCAATGGCTGGCATGTGGCCCATGGGAA
 AATGCTAACAAGTTTGTGGTGACAAGAATGTTATACTAATCAGTTCAGATTTGAGGCAT

68124 GTGCTATAGACATCTAGTGGGTAGAGGCCAGGGTTGCTGCTAGACATCCTACAATGCACA
 GCATAGACCCCCCTCCACAAAGAATTATCCAGTTCAACATGCTCATAGGTTGAGAAGC
 ACTGGAGGAAGAGGCATGTAAGCCAAATAATTACAATCTTTTGAATAGAGCTATCTGAAA
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 [A, G]
 CGAGGAAATGAGGCAGCAGGAGCTGAAATGATGGCTTAAGTTCACCTGGTTAGAAATGGA
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TCCCAATGGCTGGCATGTGGCCCATGGGAAAATGCTAACAAGTTTGTGGTGACAAGAATG
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68787 CTTAGAGGACCTTTATGTTGTGGAATGTCGAGTCACTGAAAGCTTTAAGCGAGGCTTGGA
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AGAAACGGGAAGAAGGAAGACCAGTTAGAATGTTGCAACATCACAGGTGAGGGATGCTGA
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[A, G]
GACTCGGGGGTTAATCTCCCCACGTTAAATCCTATACCACTTAATGAGCTGAGTGAATTG
GGCAAATATCATGTTGCCCCGGCCTCACTGCTCTTCTGTGAAATGGAGATTGCGATCACG
GTGTCTACCTGTTAGACACTATGGTGGTCTGAGGATTAACAAAAGAAGCTCAGTAACTT
TGAGCTCTTGTATTGCTGCTGCTTATTTGTTAGGGAAGGAAGAAAAAAGAAACCAGAA
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69668 CACTGATCTCTCTCCCCGCTGCTTCTCTGGTTTGAGGCACAGTTTCAGAGAACCTGAGGG
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[C, A]
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CCGTCTCTAGAATCTTACCCCTGAGATGTGAGGGAGTGTGCAGACGATTGTAATGGGTA
ACTTCCTGCAGAGCTGGTGTAATAATAAAATATAGCTACCACTTACTGATTGTTTACTTT
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69701 GAGGCACAGTTTCAGAGAACCTGAGGGACCCGGTGGGCTCAGGCGGCCTCAAAGCAGCAG
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TCCCCAATGCTGACTGCAGTTAAACCCCTAATGAGGTATGTGGATCTTCTAGAGGAAGGG
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CTAGGACCAAGTTTGATGTCCTAGGGCCAGCCGCTTAACCCGAGCTGGGGCTCAGCAGTT
[A, C]
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69773 GTGGAGTGACCACAGATTCCAAGGTGTGACCGAGTGAAAGGGCTTATATCCCCAATGCCT
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[C, T]
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CTCCTAGGCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTT

70257 GCTCTCTTACCCACACTGGAGTGAGTGCAATCATGGTTCACTGTAGCCTGGAACCTC
CTAGGCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTTGGT
CCAATCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCC
TCTCTTCGGTGCTTGCCCTCCAGCAAGTTACTGAAGTCTCAGAGGCCTCTCCACCGTGAA
ATGGACACTGTCTGTCTGTGGGACTACAGGTGGATACCACCAGACCAGCTAATTTTTAA
[-, T]
TTTTTTTTTTTTTTTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAACT
CCTGGCCTCAAGCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAG
GCACCATGCCAGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAA
ATCCCAAGAAGTTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAACTTGGA
TTTGAGCCCTGGGAAGCCAGACTCCAGAGCCCACACAACCTGAACCTTGTGCCATACTGC

FIGURE 3, page 80 of 107

70261 TCTTACCCACACTGGAGTGCAGTGGTGCAATCATGGTTCAGTGTAGCCTGGAACCTCTAG
GCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTGGTCCAA
TCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCCTCTC
TTCGGTGCCTTGCCTCCAGCAAGTTACTGAAGTCCTCAGAGGCCTCTCCACCGTGAATGG
ACACTGTCTGTCTGTGGGACTACAGGTGGATACCACCAGACCCAGCTAATTTTTTAATTTT
[-, T]
TTTTTTTTTTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAAACTCCTG
GCCTCAAGCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAGGCAC
CATGCCCAGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAAATCC
CAAGAAGTTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAAACTTGGATTG
AGCCCTGGGAAGCCAGACTCCAGAGCCCACACAACCTGAACCCCTGTGCCATACTGCTTAC

70268 CACACTGGAGTGCAGTGGTGCAATCATGGTTCAGTGTAGCCTGGAACCTCTAGGCTCAAG
CAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTGGTCCAATCCCCTC
AGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCCTCTCTTCGGTG
CTTGCTCCAGCAAGTTACTGAAGTCCTCAGAGGCCTCTCCACCGTGAATGGACACTGT
CTGTCTGTGGGACTACAGGTGGATACCACCAGACCCAGCTAATTTTTTAATTTTTTTTTTT
[-, T]
TTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAAACTCCTGGCCTCAA
GCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAGGCACCATGCCC
AGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAAATCCCAAGAAG
TTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAAACTTGGATTGAGCCCTG
GGAAGCCAGACTCCAGAGCCCACACAACCTGAACCCCTGTGCCATACTGCTTACTTGATC

70941 AGAAGGAAACATGATTCAAGAAACTGGGCTGTCTGGCATGGTGCTATAGCACTCCACGTG
GGGAATATTGTGTTTTCAAAGAAAGGGTGTGTTAGAAGGGGAATGATCATGGACGTTATA
TCAGATAGACTTGGTCCCTCAACACCACTAAACCTAAGGCCCTCCTCATATTAAAGGGA
TCACAGTCTCTATTAGGATGATTGTGGGGAGTGAGTGAACCTAGCAGAGTGCCTGGCATG
TCACTGGCATCAGGAAATGCTATTTCCCTTCTCCACCCGCTTTTCTCTCTCAAGCGAAC
[G, A, T]
GAGTAGACAAAGATAATTATACCTGGAGTACTTGCAATTTCTTTGGCAGTAGAATAAAGTA
AATTAAATGTATTTTTGAAGTTGAGGTTTCCATGAACCTGATTTGGCGGTCACTGTGTCC
CAAGAAAGCCTTTATCTTTGACGTCTCACATGCCGCAATTGCTTATCTCCCTGTTCCCA
GTGCAATTGTCTTAGAAGCTTCTATACTGACTAGTCTTGAGAAAGCCATAAAACATTC
TCTTTGTGATCCTCAAAGAATAAAATCGTGAGGAGCCTTCGCTGACTGACGGGGAAGTG

71359 TCCCAAGAAAGCCTTTATCTTTGACGTCTCACATGCCGCAATTGCTTATCTCCCTGTTC
CCAGTGCAATTGTCTTAGAAGCTTCTATACTGACTAGTCTTGGAGAAAGCCATAAAACAT
TCCTCTTTTGTGATCCTCAAAGAATAAAATCGTGAGGAGCCTTCGCTGACTGACGGGGAA
GTGTAGAATGAATGCTTCGGTTTGCAGGGATGATCATTGGCAGCAGTCTTTTTTCAGGTT
ATGAATTCTGATGTTTCCCAGATGTTTGAAGATTTTGAGTGTCTTCAGGGGAGCTCGAGT
[G, T]
GTCCCATGGCTGCCATTTCTTCTGGTCATAGCCTCGCTGAAGGGAATAGCATTTTCACGGG
AGTGGGTTTAGGGTTGGATGAGGCACCCATCGGGAAGGACATGGGATTTTTTCATTCTAAG
TGCTTGCCATAAAGCAAACGACAGGGGTCTATTCCTCTCTCTGGAGAATGTTTCTGG
GGCAGGTTGGTCTAATCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGTAGGCTGCC
TTCTTCCTTGGCTCACTTCAGTCCTTGCTCCAGCAAGAGGGGTCTCTCCAATGCAAAAT

72550 TGAGTATTATTTGGCAAGATTTATTATTTTTTCATTAAAAAATAAAAATGACCTATAAT
AATTGTATGTATTTATGAGGTACCTCGTGATGTTTCCATACCTACAATGTATGATGATCA
GATCCGGGAAATTAGCATATTATCATCTCAAACATTTATCATTTCTTTGTGTTGGGAAC
GTTCAATATCCTCCTTTTAGCTATTTGAAACTATATACTAGATTATTGTTAACTGTAGTC
CATCTGCAGTGGTATAGAACACTAGAATTTATTCCTGTTATCTTGCTGTAATTATGTCC
[C, T]
GTTTAAACAAATCCTTCCCTATCCTCTGCTCCCCTGACTCTTTCCAGTCAGCATTATTTAT
TAGGCACTGATTCTGTGCTGGCTGGGTGCTAGAGAGTTTACATATATTACTTAGCTTCAT
TTGCCCTCTCTCCATTGCACCAAGAGGCGGCCACTGTGCTGCCCCATTTTACAGAGGGTA
AAGTTCTTGATCTAGCTAGTGACCAAAGCAGGACTTGAGTCTAGCTAGATCTCTCTGAC
TCCAGAGGCCACGCTCTCTTAATCGTACTCTCCTTGGCTTGACACGGTGGGCTTAGAGAG

75313 AGCCTCCTGAGAAGCTGGGACTACAGGGGTGTGCCACCACACCCAGCTAAGACAAAAACT
CACCTTGTTGTCTTCTTTATGCATGAGCAGATTCCCTTGGTATCTATAGCCGTCGAAGCT
TTACGTATTTCCCTATTTAGGGACATAAGAATTTTAGGAAAGCAGCGTGTTGGAAGCA

FIGURE 3, page 81 of 107

CGGCACCTGAGATGTTTCATGGAAATCCTTGTTGTGACTTCAGAGTGCAGATCTAGAGCAG
CCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTAGTCCAGGAAGTT
[T, A]
AGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCTTTGAGCCC
AGGGGCACAACCTCTGAGTTGAAGTGAAGTCTCTCTGGCTGTTGCTTTGAATTTAGAAGAGC
TGCCCTTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGTGCAAGATCAGGCC
TGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTACGGTTTCTATCCCT
GGGGTTATTGATTTCATCACTGTTTAGTGAAGGAGATCTAAAGCTTTTAAGCCAGAAATT

75541 GATCTAGAGCAGCCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTA
GTCCAGGAAGTTTAGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCTGG
GTTCTTTGAGCCCAGGGGCACAACCTCTGAGTTGAAGTGAAGTCTCTCTGGCTGTTGCTTTG
AATTTAGAAGAGTGCCTTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGT
GCAAGATCAGGCCTGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTAC
[G, T]
GTTTCTATCCCTGGGGTTATTGATTTCACTGTTTAGTGAAGGAGATCTAAAGCTTTT
AAGCCAGAAATTAAGAGGTAATGGAAATTGGCATGCCACTGGAAATGAATTTGCAAAT
GAGAATTCAATGTTCTAAAAAACTCCCATAAAAAATAAAACCAAAACCCAGAAAGTGAATG
CTCCTGTGACTGCATTTTTTTCCAAATGTGCATGGGTTTGTCTCCTTTAGAGTGTGGCT
GTATACATTATGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCTTATTA

75957 CAAATGAGAATTCAATGTTCTAAAAAACTCCCATAAAAAATAAAACCAAAACCCAGAAAGT
GAATGCTCCTGTGACTGCATTTTTTTCCAAATGTGCATGGGTTTGTCTCCTTTAGAGTG
TGCTGTATACATTATGGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCT
TATTACTTATCACAATACAATGTATTCAATTTATATAACTAATATTTACTTAGTACCTATA
ATGAAGCAGGTGCTATGTTTGGCTCTAGCGATTAAAAACAATAAAAAATGCAAGATGCC
[T, G]
CCACCCTGTCTCAGGGAGCTTGAGGTTCAGTATTAATTATATCGCTAGCCAATTCTGGC
ATGGTGCTTACTGTGGACAGGAAGTCTCTAAATGCTTCACGTGTAGTAACCTCATTTAAA
TTTTACTTATCCTATGAAAGTGGGTAAGCAACAGAGGAACAGAGAAGTTAAATAACTT
GCCCAAGCTGAAAGTGAAGGTGGAACTGTGATCCGCCAAGGCAGTCCGGCTCTAGATC
CATGGTTTTTTAGCCATGATGCTCTACTCTAGTGGATAGTTACAGCCCAGTAGCTATTGGT

76415 GGAACAGAGAAGTTAAATAACTTGCCCAAGCTGAAGTGAGAGGTGGAAGTGTGATCCGGC
CAAGGCAGTCCGGCTCTAGAATCCATGGTTTTTTAGCCATGATGCTCTACTCTAGTGGATA
GTTACAGCCCAGTAGCTATTGGTTACTAGATTGGTTCTAGAAGACAAGGAAGCACTCAGG
TCCTTAGTTCACAGAGCAGGAGTCTCTGACTCAACCTATGGGACCCCCAAGAGGACCTTCA
TTCACCTGTGAGTCAACTGCAGAGAGTCGTGATTACCTCCTGGTTGTCTTTAGAGTGGC
[A, C]
GGGCTTTGTGTCTTAACATAAGGTGTTGAAGCTGGGTCAACCTTTTCGATCTAAAACCAA
TGTCATGGGTTATCATTCAAGTCTGCAATTAAGAGTAGCTTGTCACTTTATATTGGGAA
CATTTATTTTTCTTCTCTCTATGGAATGGGCAGAAGAGATGAAAAGCCTGCTGGTG
CAGCTTAACTTTTCTCAGTAAGTGAGTGTTTAACCTTTTGTTTTTTTTAAAAATGGAGATG
AGACATACAAATTATGACTTCTCTATGTTGTCTTTTTTTTAGTTGGAAGAAGGTGACAT

77872 TCTGTAGCTGCTTTTGTAGTCCAGTACAGTTTTTTTAAAAATAGAAATTGGATAGACCCA
TTTTTAATGGGAATGATCTCAAGTGCAGAGAGAGCAAGGCATATATCAGACACTCTCCTC
AGGACCAGGGCAATTTTTCAACATCAGTTGGCAAATTTGTTATTCTGCCTGTAGAGTGTA
AGTCCAAACTGAGATGAAAGAGTGACAGCTTGTAGTCTGAAAGTTTATTGATCATATCA
AAGTATACACATCTATCCCTGATTCTTAGTGGACTTGATACTTTCTCGTGGTTTTAAAA
[T, A]
TTGTCTTATTTTCATCCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCA
TAAGGCACAATTTGGAAGCTACAAGAGTGCCCCCAATATGGCCTGGTCTCATAAGATAA
TATTTAGATAGATTAGTCGTTAGTGAATACCAAGGGGCTAATGAATTGAGTCTCAGAAA
TCCCCATTGTAAGGGATTAACCTGTAGTAGCAAGGAAAGCTAGCGTGTCTAAGACCATAC
GCCATGAGCAAGCATGCTAGCCCATCCTGGGTTTCTCTCTCTCTCTCCAAACAGATTC

78058 AACTGAGATGAAAGAGTGACAGCTTGTTAGTCTGAAAGTTTATTGATCATATCAAAGTAT
ACACATCTATCCCTGATTCTTAGTGGACTTGATACTTTCTCGTGGTTTTAAATTTGTCT
TTATTTTCATCCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCATAGG
CACAATTTGGAAGCTACAAGAGTGCCCCCAATATGGCCTGGTCTCATAAGATAATATTT
AGATAGATTAGTCGTTAGTGAATACCCAAGGGGCTAATGAATTGAGTCTCAGAAATCCCC
[A, C]

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79799 TGGCTGGAATAGGCTCCCTTTTTTTTTTTTTTTTTTTTTTCTGAGACGGAGTCTCGCTC
TGTCCCCCAGGCTGGAGTGCAGTGGCGCGATCTGGGCTCACCGCAAGCTCAGCCTCCCTG
GTTTCATGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACTACAGGCGCCCGCCACC
ATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATAGGCTCACTTTTAATACATT
TTAGAAACCACTTTCCACATTTCATGCCCTCATCTGCCTCAATCCCTGGCTAAATCTCCA
[A, G]
TTCATAATCCCTTTTGCTGACTGTGCCGTTTCAGGGAGTAAGAACGTGGTGGACGCAGCCAC
CATTGTACCCTCAGATGAAGTCCTTTCTCGAGAGACAAACAGTCTGTTAGTAAAAATGACC
ATACATCCTGGGTGACCTGTCTGTGGTCCAGCAGTACAGCTGTTAACAGAGCTACCTTT
TTATTTGCAAGTTCCCTGCCTTTGGACAATAGATCAACTGGTCATCCAGCTATTAGCGTCC
ATGCATAAAGCACGAATCTGTTGTATTCTTCAGCCAATCTGAGACAACCAAGAGATTACT

80598 TTGCTGATGGGAGGAAACTGGTGGGGAACCGTGGTGGGGGGTCTGTGAGGGGTCCAG
TTACCTCCTCCTCCTCTCTTTCTAAGCGCATCAGCTACAGACCCGCTCACTTTGTGAGA
GGTTGCAGTTTCTCTCTTCTGCCTGTGAGGTAGTCTTAATGCATGGTGTGGGGGAGGGAG
GACAAGGGGAGAAAGAGGGGCACAGAATCTTTTAGATCCTGCCCTCTTCAAGTCAGCTCT
CCACCTCTTTTTAAAGAAACAAATCATTATTATTTGTTGTTTTGTTGAGTTGCTTTT
[G, A]
TGTTTGTCTAATTTTAGAAAGAAGTAAATGTTTTCTCTCACACCTCTGGGAAGATAAT
ATATCTAAATTTATTAGTTTAGTTTGTTTCATTATTTATTGTTAACTTAAACATTCAC
CCCGTGCCATTTACTGGGTGAGTCTGAGTGGGTGCTGGAATGCCAGCTTAGAGGCTAAAA
GGAAATTCAGGAGGAATGGAATGAAATGTAAGTAATGCCCTCTTATCTACAGTATCC
CCTCGTATCTAATTATCTGTCTACCTCTATTGAATTAATCTGCCTGTGTGAATTTTTGTAT

82609 GTGAAGATGGGAGTAGGGGAGGCCAACATGCATTCTAGGTACCAAAGGTAGAGGAAAGGCA
AAACCATCCGCTTTGGGCCAGACAGGGTTGAATCCTGGCCTCTTCACTTCTTGGCTGGGT
GACCTAGGACAAGTTAATTAAGTTTCTGAGCCTGTTTCCCCATCTCTAAGGTGGGGAT
AATACTACTTTCTTGCAAGTTATGGAAAGGATAGAATGGAATCACACACAAGTTGTAGAA
AGGATAAAACAGAATGACGCTTCTAGTGCACCTGGCGAAAGGCAGGCACTTAACAACCTGT
[A, G, T]
AGTTCCCTTTTTCCTTTCAACTGATAAACACTTTTCCTTGAGGGTTACATAGGTAACATTA
AATATTTATGAATTGCATAATTCAAGAAAAATGAAACTTGAAAAGGATTCTTCAGATTTT
TTGATGAACAAATCATCGTCCCCATTGTCTTTGTGCAAACTGTGTGTTTTTGTGTGAC
TGCTGGGTTTGCCTATGACATTTGTGTGCAATTCAGACCCGTGAGACTTGAGTGAGCC
TAACCTCTCTTCACAGCTTGATAGGAGTTGTAAATATTAGGTACTGATGGTATGATTTGA

83645 TGAGTCTGCCAAATCTAGCTCGCAGCATCTTTTTGTACAACCCCTGAGCTGAAAATGGTT
TTTGCATATTTAAAAGATTATTTAAAAAAGAAAAATATCCAACAGAGACCCATATGTGG
CCCACCAGGGCTAAAATATTTACTATCTGACCCTTTATGGA AAAAGTTGTTGATCCCTGG
TTCAGAGTGTTTGAAATAACTCAGATGAAAGAAGGCAAAATGTAATGATGATTGACTTTT
CCAGTTGTAATCTGATTTGTGACAACCACTGTATGCCTGTTTTAACAAAGCTTAATGGGC
[A, G]
TTA CT TAGGATAAAATGTAATTACGTTTCAATATTTGTGTCTTGCTCTCCCTACATAGGGT
TATTCCAGGTTTGCCCAAGGAACAGAGAGTCTGTTTGTGTGTTCTAGAAGTAGCTCCTGTG
TCTGTCACTCCTCTCCCAAGGCTTCCACCTGTGCGTTTTTTATCCCAGTTCAACCGTGTG
AACAGCATGTGTTTCGGCTGCCATGACAGCACGTCTCACTTTTTCCCTGGCTTGAAGA
AGATGGCAGGGGGCTCAGGTCAGGAAGAACTGCTACGGAGTTTTTTTCACTTCTCCTGCTCG

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TCCTGCTCGTGATGAGGCTAGGGAGGGATTTTTAGCGTATCTTTAATTGTTGCCGAAGTA
TGAACTCGGGGAAGGGGGCAACTGTGAAGCAGTGATGCATAGACTAAGTCTCCTGGAAGA

84687 GGGTGTACTTTGGACCATCTCATTTAATCCTCACAAACACCCTGTGGGGAAGGTATTATC
TCTAGTTTGCAAATGAGGAACTAGGCTCAGAGAGGTTCAAACAACCTGCCCAAGGTTCT
GAAGTTAATAACGGCCACAGCCAGGATGGCTCTTAACTCCTGCCCTGTGGAACAAGCTC
AACGTAAAACATTCTTACAAGACAGAAAAGAGTGAAAAAGCAACCAAATCCTGCCCTGC
GGAAATGCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGTGTGTATATGCACAG
[A, C]
AACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTC
ACCATATTCTATATCCTAGCGTTTCCCCCTATTTAACACTAATTTTCTGATTTTCACAA
CTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTA
GATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAA
AAAAAAATAAACAACTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCAGCATGC

84761 GAGGAACTAGGCTCAGAGAGGTTCAAACAACCTGCCCAAGGTTCTGAAGTTAATAACGG
CCACAGCCAGGATGGCTCTTAACTCCTGCCCTGTGGAACAAGCTCAACGTAAAAACATTC
TTACAAGACAGAAAAGAGTGAAAAAGCAACCAAATCCTGCCCTGCGGAAATGCCACTT
TGGGTGAACATTCTTCTAGACATTTTTTGTGTGTGTATATGCACAGAACTTGTAACATT
TTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTCACCATATTCTATA
[C, T]
CCTAGCGTTTTCCCCCTATTTAACACTAATTTTCTGATTTTCACAACTGGGTGCATAGTA
TTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTAGATCACTGCAGGTT
CTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAAAAAAAATAAACAA
ACTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCAGCATGCTCTTGATGCTGACA
ATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAGCAGCCACTGGGACCTCGGCA

84911 CAAAATCCTGCCCTGCGGAAATGCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGT
GTGTGTATATGCACAGAACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCA
AGCTTTCTATAAATGTCAACATTTCTATATCCTAGCGTTTCCCCCTATTTAACATAA
TTTTCTGATTTTTCACACTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCAC
TTAACCAGTTCTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACC
[-, T]
TTTTTTTTTTGAAGAAAAAAAATAAACAACTTTTAACTGAGTCTTATGCTTTTTCCCC
TTTCTTTGCAGCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTT
CCAACAACAGCAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAAGTGTCAATTA
CGACCATAGGTACCGTTTTGTTTGTCTAATATCTCTCCTCTGCAGGTCACTTTGAGTAAG
GGCGCTTAGTCAGTGTTTTGTCTCATAGCATACACTATAGTTTGAGGTTTCAAGGAGGC

84921 CCTTGCGGAAATGCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGTGTGTGTATAT
GCACAGAACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTAT
AAATGTCAACATTTCTATATCCTAGCGTTTCCCCCTATTTAACACTAATTTCTGATT
TTCACAACCTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTT
CTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTT
[-, T]
GAAGAAAAAAAATAAACAACTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCA
GCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAG
CAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAAGTGTCAATACGACCATAGG
TACCCGTTTGTGCTAATATCTCTCCTCTGCAGGTCACTTTGAGTAAGGGCGCTTAGT
CAGTGTTTTGTCTCATAGCATACACTATAGTTTGAGGTTTCAAGGAGGCTTACGAAACA

85786 ACCTTTTCTTACCTTCCCAGAGACTGTTGCTTTTCTGCTTTTGTGTTGATTTTAACA
CTCATCCCCATGTCTTAAATATCATGCTTGTGCTACTTCTGGAATTTTCACTTTTGGGG
ATTTTTTTTTGACTTTCCATTGTGGAAGATGAGGAGTTAGTTCTTCTTCTGCTGCCTC
ATCAGAGAAGGGCTCTTTTCTGTCTCTCTGCTTTCCCAATATTTAATTAGATAGAAGTG
AAACATCTGCATGATTTTGACTAGATAAATGCTTTCTGCAGCTGATCATAGAGTGAACAG
[C, T]
GATGACCTCTTTCTGTATCAGTCTTTGTCTTATTTTTTGTATGTGTGCTTTTTTTTTCT
GACACTTGGTGAGTTTTGTATTTTGTCTTAGGGGTTAACTTTATTTATTTATTTATTTT
ATTTATTTTATTTATTTATTTATTTATTTTATTTTATTTTATTTTATTTTATTTTATTT
CCCAGGCTGGAGTGCAGTGGTGCAATCTCGGCTCACTGCAACCTCCGCCTCACGGGTTCA
AGTGATTCTTTGCTCATTCTCTGAGTAGCTGGGATTACAGGCGCCACCACCATGCC

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CACCCAGGCTGGAGTGCAGTGGTGAATCTCGGCTCACTGCAACCTCCGCCTCACGGGTT
CAAGTGATTCTCTTGCTCATTCTCTGAGTAGCTGGGATTACAGGCGCCACCACCATG
[C, A]

CTAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTACCACATTGGCCAGGCTGGTCT
CAAACCTCTGACCTCAGGTGATCTGCCCCCTCAGCCTCCCAAAGTGTGGGATTACCGG
CGTGAGCCACCGCACCTGGCCTAGGGGTTAACTTTATAAGTATAATGGCATATAATAATT
TTAGTGTTCATTTCGTTAACCAGCATGTATTGATCCCTATAACGGGTGATGATATCTCT
TTTCTCTCTTTTTTCCAACACAAAGTTTTGGTGGACATCATCTTTTAAATGATTAAATTTG

86585 CCAGCATGTATTCGATCCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACA
CAAAGTTTTGGTGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATG
ATTTGCCAGCTTTAAATGATACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTG
AACTTAGCATCTCAATTTCTTTCCCTCTTCCACTATCCACTCTTATTCATGGTGTCTATT
CTATATAAGTTGTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAG
[T, -]

TTTTTTTTTTTAAACTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGT
GCCATTTTTCCAACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTGGTAATTTTCA
CAATAGTTTCAACCTTTTTTCAATTTTGGATTATATCTGTTAAGGAGATCTGTGGTCAGTGA
TCTTTGATGTCTGATTGTCTATTGTTTGGGGTGGCACAACCATGCCCTTTGAAGATGG
TGAACCTAATCAATAAATGCCGTGTCTGACTGTTCCACCAGCTGGCCATTACAGGCAT

86596 TCGATCCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACACAAAGTTTTGG
TGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTGGCAGCT
TTAAATGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTTAGCATC
TCAATTTCTTTCCCTCTTCCACTATCCACTCTTATTCATGGTGTCTATTCTATATAAGTT
GTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTT
[T, -]

AAACTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGGCATTTTTCC
AACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTGGTAATTTTACAATAGTTTCA
ACCTTTTTCATTTTGGATTATATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTC
ATGATTGTCTATTGTTTGGGGTGGCACAACCATGCCCTTTGAAGATGGTGAACCTAATC
AATAAATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTACAGGCATCCCAGATCCCT

86601 CCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACACAAAGTTTTGGTGGAC
ATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTGGCAGCTTTAAA
TGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTTAGCATCTCAAT
TTCCCTTTCCCTCTTCCACTATCCACTCTTATTCATGGTGTCTATTCTATATAAGTTGTATC
TCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTTTTAAAC
[T, A]

AATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGGCATTTTTCCAACGT
CGTGTGCTCCACTCTGTGTCTCTGCCACATTTGGTAATTTTACAATAGTTTCAACCTT
TTTCATTTTGGATTATATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTCTGATG
TGTGATTGTTTTGGGGTGGCACAACCATGCCCTTTGAAGATGGTGAACCTAATCAATAA
ATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTACAGGCATCCCAGATCCCTGAGGC

89478 GTATGCCTGTATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTG
CATTGTGTTTTAGTCGTAGCTCTATAGTTAGATATCATTAATGTTTCACTCTAGTCCTTTT
GCTGTGGTTTTATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCCTTA
AGAATGGCTCAGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAA
CATTGAAGGATAGTTGAAACAAAATGAAATCCATTTATTGACTCACATTTTCTTTTTTC
[-, T]

TTTTTTTTTTTGGAGCTGGGTCTTGCTCTGTTGTCCAGGCTGGAGTACAGTGGTATGAACA
TAGCTCACTGCAGTCTCCAACCTCTGGGCCCAAGTGATCTTTTGGCTTCAGCCTCCTGAG
TAGCTGGGACTACAGGCGCATACCACCAGGGCTAGCTAATTTTTTAAATATTTTGTAGAA
GCCAGGTCTTGCTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCCT
ACCTTGGCCTCCCAGAGTGCTAGGATTACATGTGTGAGCCACCAGCCTGGCTTTACATT

89488 ATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTGCAATTTGTTTT
AGTCGTAGCTCTATAGTTAGATATCATTAATGTTTCATCTCTAGTCCTTTTGTGTGGTTT
ATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCTTAAGAATGGCTC
AGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAACATTTGAAGG
ATAGTTGAAACAAAATGAAATCCATTTTATTGACTCACATTTTCTTTTTTTTTTTTTT
[-, T]

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GAGACTGGGTCTTGCTCTGTTGTCCAGGCTGGAGTACAGTGGTATGAACATAGCTCACTG
CAGTCTCCAACCTCCTGGGCCCAAGTGATCTTTTGGCTTCAGCCTCCTGAGTAGCTGGGAC
TACAGGCGCATACCACCAGGCTAGCTAATTTTAAAAATATTTTGTAGAAGCCAGGTCTT
GCTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCCTACCTTGGCCT
CCCAGAGTGCTAGGATTACATGTGTGAGCCACCACGCTGGCTTTACATTTTCTTTTAA

91631 TTGCTTTTGTTTTAAAGATCTAGCCTTCAGGACCTATGTTGTTTCTAGGTGAAATCCAGAA
AGTCATATGCAACAAGAACATTTTGGATGAAGGAAAATTGCCATTGTTATTTAGAAACAC
TCTTAATCTAATTATATGACATGCTAGGTTTACACTTGCAAATCTGCAAATATATTGGTG
TTAGCTATTTAAAAGTATTCAAGATGCCCATGACACCAGTGGGTCTGGGGCTTAGAAGCCT
TTTCTGGCACTCTAGGCCAGGTTAGGTGAGCTTAATCCACAGACTCACAGCGTCCAACAA
[A, G]
GGAAGCTGGGTGGCCTGACACCATTTAGTATACGGGCAAAAAGTGTTAGCAACCTGAACA
ACACCAGAGGGCGTTGCTGTAGTGGATCCAAGAAGACCAATGTGAGGTTTCATTGTGTTT
AGCAGATTGTTAACCTGGGAAAAAGTGTCACGCATTGTAGGAGGATCTATTGTACACCAA
TTAAATTGAGAAAGTCTGGGCCACTTCAAGAAGTACATTTTGGAAAATGCTCTCTGATA
CCCGGTATTGGATTTCATGAGACATTAGTGTGTATATTGAAGGAACTCCTAATTTTCTTG

91898 CAGCTTAATCCACAGACTCACAGCGTCCAACAAAGGAAGCTGGGTGGCCTGACACCATT
AGTATACGGGCAAAAAGTGTTAGCAACCTGAACAACACCAGAGGGCGTTGCTGTAGTGGA
TCCAAGAAGACCAATGTGAGGTTTCATTGTGTTTTCAGCAGATTGTTAACCTGGGAAAAAGT
GTCACGCATTGTAGGAGGATCTATTGTACACCAATTTAAATTGAGAAAGTCTGGGCCACT
TCAAGAAGTACATTTTGGAAAATGCTCTCTGATACCCGGTATTGGATTTCATGAGACATTA
[G, C]
TGTGTATATTGAAGGAACTCCTAATTTTCTGTTTTCATGACATGGCTAAATGAATGATC
TGTCTGCTGCATTGAAAAACACTATGGCTACATTGGAAGGTGCATTAATGGTATTATTG
TGTTAGCTTGTTAGGAATCCAGGAACCTGGTTTATGAACAACATGTTTATTGATCCAC
ATAATATTATGTGACTGAGGAATGGTGGCTCCATCTGCCTAATGAAGAAGCTTTGATATG
CGATGGTTTTTGGCCTTTTTGTGTGTGTGCTTACACCGAATCTTTGAGTTTGAGCAAA

93506 AATTTTAACTCCAGAGTGGAGGATCTTTATAGAGTCATACAGTTAGAGAATCCAAAGAA
GCCCTTAATACAATGTAAGTAAGAATAATGAGGTGCAGAAATAATTGTTTTTCCAGTTAC
TTAGTGGTAAATTCATTTGTTGCTGTGGTCGCAAGGTTTATAAGAAAACCTCAGAGCCCA
GCAATTCCTCCAGTTCTTCTGAGCAATTTTCCACTAGTTAGGAGTCAGGAAAGAGGAAC
CGTGAGAGCTGAGGAGCTGTGTATTTCATTAATTGTGAAATACACAAATATTGGCCTGTT
[T, C]
CCTTGCGATCATAAAAATTTGCAACGTAATATTGCAGACATTTTTTGCATATTACTAAAGTT
CTTTGAAAAGTGATTCTTTGATGGTTTCTATTGGATCCACTATTCACACTATAATCACA
TATTCCTGGGAACTTAAGCTGTTTCTATTTTAGTAATAGTGTAAACCATGGTGTAAACG
TTGTGAAGTGTGGTCTTCATCTCTGGTTGTTGCCTTGGAAAGGTTACCAAGGGTTTGCTC
TGTCAAAGGAAATGAAAGGCTTGCCAAATTTCTTTCCAGAAAGGCTCTCATGAGCAGCTT

94409 GTCCCTTTCTCAGTAACTAATTCAACGTGAGAAAGTCCCACCTGCCTTTGATTATTGGCT
CAGCTGGTGGGTCCCCGTAAGTACTAGCTTTTCTAAGCTGGATGAATGATGCTCACTTCTAT
GTGCAGATGCTTTTTCAAGCTGTCTTTGTAGAAGGACAGCGAGCGATCAGGTTCTTA
CCAATATCTGTGAAATGCGATTAGATTTTAGTCTGTGAGGCATTTTCAGATTGAGCCACC
TGACTCTGCCACATCAGAGAGAGAGCCTCTGGTCAGGACCAGGTGGTAGCCAGTCACTG
[T, C]
GTCCTAGCCTGGCAGCCTCATTTAAGGGTTGTCCCTATCAAACATATCGAGGCACCTGTT
GGTACTTACCCAGCACTGGATTGGATGTTTATTTTATTTTATTTTATTTTATTTTATTTCA
GAGAAGGGGTATTGCTTTGTTGCCCTGGGCTGGAGTGCAGTGGTGTGATCATAGCTTACTG
TAACCTCAAACCTCCTAGCTCAAATGGTCCTCGCGCCTCAGCCAACCAAGTAGCTGGAAC
ATAGTTGTGCACCACCATGCCGGCTAATTAATAAAATTTTTTTTTTTTGTAGAGACAAGGG

94689 CAGGTGGTAGCCAGTCACTGTGTCACTAGCCTGGCAGCCTCATTTAAGGGTTGTCCCTAT
CAAACATCGAGGCACCTGTTGGTACTTACCCAGCACTGGATTGGATGTTTATTTTATTTTAT
TTTTATTTTATTTTATTTCAGAGAAGGGGTATTGCTTTGTTGCCCTGGGCTGGAGTGCAG
TGGTGTGATCATAGCTTACTGTAACTCAAACCTCCTAGCTCAAATGGTCCTCGCGCCTCA
GCCAACCAAGTAGCTGGAACATAGTTGTGCACCACCATGCCGGGCTAATTAATAAAATTT
[T, A]
TTTTTTTGTAGAGACAAGGGCTCACAATATTGTTTCAAGCTGGTCTCAAATTCCTGGCCTC
AAGTGATCCTCCACCTTGGCCTCCCAAAGTGTGAGATTATGAGTGTGAGCCCCACTTG
ATTTAGATGGGATGTTTAACTGTGCCTTTGAAAAGAGCAATCACCGTGGCTAACATTTA

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CTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCTCATTTAATCCTGC
ATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGAGAAGACTGAGGCC

94856 GGCTGGAGTGCAGTGGTGTGATCATAGCTTACTGTAACCTCAAACCTCTAGCTCAAATGG
TCCTCGCGCCTCAGCCAACCAAGTAGCTGGAACATAGTTGTGCACCACCATGCCGGCT
AATTAATAAATTTTGTAGAGACAAGGGCTCACAATATTGTTTCAAGGCTGGTCTC
AAATTCTGGCCTCAAGTGATCCTCCACCTTGGCCTCCCAAAGTGCTGAGATTATGAGT
GTGAGCCCCACTTGATTTAGATGGGATGTTTAACTGTGCCTTTGAAAAGAGCAATCACC
[G, A]
TGGCTAACATTTACTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCT
CATTTAATCCTGCATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGA
GAAGACTGAGGCCAGAGAAGTTAAATAACTTGCCCGGTATTTTATAGTTAGTAAGCAGT
GGAGTCCAGCTAGATTACACAGGACCAGCTACATAATTTGTGGCACCCAGTACAAATTGA
AGTGGGGTCCCTTAGAGCATTAACAAGCACAGGACCCATCTAAGCGTGGGCCCTGTGG

95303 TAACTTGCCCGGTATTTTATAGTTAGTAAGCAGTGGAGTCCAGCTAGATTCACCAGGACC
AGCTACATAAATTTGTGGCACCCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAAACC
AAGCACAGGACCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAA
GCAGCCCTGCCTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAA
CAAGTAGGGCTGCACAACACACAGTTGGGCCAAGATTTGACTTTGGCACGTAAACAGCAA
[A, G]
TGGAAAGCCTTTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTTC
CTGAAAACCGGGAACTCTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGC
TGTGCGTTTCATTACAGCCTCCCTTGGCTGTTTGCCTTGTGGAGTTGGTTGTCTTCTGC
TGAAAGTCAACACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAA
GATAGGAATCAACCGCCTGTTTCTCTGGGACTGAGTTTCTCTGGAGACATATTGCTCA

95373 TTTGTGGCACCCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAAACAAGCACAGGA
CCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAAGCAGCCCTGC
CTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAACAAGTAGGGC
TGCAACAACACAGTTGGGCCAAGATTTGACTTTGGCACGTAAACAGCAAATGGAAGCCT
TTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTCTGAAAAAC
[G, A]
GGGAACTCTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGTGTGCGTTCA
TTACAGCCTCCCTTGGCTGTTTGGCCTTGTGGAGTTGGTTGTCTTCTGCTGAAAGTCAC
CACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAAGATAGGAATC
AACCCTGTTTTCTCTGGGACTGAGTTTTCTCTGGAGACATATTGCTCAGAAACAATTC
CTTCCACAGTAAAGCACAAAGGCAACCGGGTGTAGTTTGCATCATATTTACAGGTA

95657 TCTCTTCTGAAAAACGGGGAACCTTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATC
CTGGTGTGTGCGTTTCATTACAGCCTCCCTTGGCTGTTTGGCCTTGTGGAGTTGGTTGT
CTTCTGCTGAAAGTCAACACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTG
GAGGGAAGATAGGAATCAACCGCCTGTTTTCTCTGGGACTGAGTTTCTCTGGAGACATA
TTGCTCAGAAACAATTCCTTCCCACAGTAAAGCACAAAGGCAACCGGGTGTAGTTTGC
[A, T]
TCATATTTACAGGTATTTAATCTTCACATGTAACCTTGCTTTGCATGTAACCTCATTTA
ATCTTTAATAGCTATGGGTAGGCACTTTAATAGCCTTGTCTTTTGTGAGAAAGTGAGG
GAGAGAGATTAAGAATGTGCCTATGACCTGAGAGTTGGTAAATAGAAGAATCAGAACAGA
AATCTGTGTAGTCTCTAGTTCTAGAGCCTACAGACAACTGTACACCTTACTTCAAAGTT
CTACCCAAGCATTCTAGAAGGATGAGCAGGGCAGTCAAGAGGGGGGTGTAACCTAGATC

96312 AAGTGTGGAATTTTCCCAGAGTGACAGTGTGAGGGTCAAACAGTCTCTCCTTATAGTT
CACCAAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATC
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTG
AATATATTTAAAGGCTTGTTTGAGTATTGCATCACTCATGCTCTTACCAAGAACCTTAGC
TTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG
[-, A]
TAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCC
CCCTGCATTTTCTTGTAGTACCTCTGACACTAGGATTGCAGATGTTAAGTGGGTCTAAG
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTTCTCTCTCACTTCTCCCT
GATGCTCCATGGTAAGCCACAGTGCCCTTACCCAGGAGGTGGGTGGGGTGGTCTCTCTG
AAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTATCCAGT

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96315 TGCTGGAATTTTCCCAGAGTGACAGTGGTTGAGGGTCAAACAGTCTCTCCTTATAGTTCAC
CAAAGGCATGGAGCACAATACTACACTCACACACACGCCCATGCATGAGATACAGCATCACT
CAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTGAAT
ATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTT
AATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATA
[- , A]
TAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCC
TGCAATTTCTTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAG
AACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGAT
GCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCACTCTCTGAAA
GCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCC

96329 CAGAGTGACAGTGTGAGGGTCAAACAGTCTCTCCTTATAGTTCACCAAAGGCATGGAGC
ACAAATACACTCACACACACGCCCATGCATGAGATACAGCATCACTCAAGAATGATGACT
TTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTGAATATATTTAAAGGCTT
GTTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGT
GTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATAATAAAT
[- , T, A]
CTTTCGATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGA
GTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTG
AGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGC
CACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCACTCTCTGAAAGCTGGAGGAAGGG
GTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGCCTCCACTTGT

96370 TTCACCAAAGGCATGGAGCACAATACTCACACACACGCCCATGCATGAGATACAGCA
TCACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTG
TGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTA
GCTTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTG
TGATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTT
[C, T]
CCCCCTGCATTTTCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTA
AGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCC
CTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCACTCT
TGAAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCA
GTTCCAAGCCTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGG

96372 CACCAAAGGCATGGAGCACAATACTCACACACACGCCCATGCATGAGATACAGCATC
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTG
AATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGC
TTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG
ATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTTC
[C, T]
CCCTGCATTTTCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAG
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCT
GATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCACTCTG
AAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGT
TCCAAGCCTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGGACA

96439 AATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTGAATATAT
TTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATA
TTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAA
TAATAATAATACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGC
ATTTTCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAAC
[T, C]
AGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTC
CATGTTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCACTCTCTGAAAGCTG
GAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGC
CTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGGACAACCTATA
TTCCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTCACAAGT

96468 TGTACCAAAGAAAGATGGCTGTGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACT
CATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGTGTTCTAGTCAACAAAACAC
TGACAAATAAGGAACCAATTGTGATAATAATAATAATAACTTTGCATTGGTACAGTA

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CTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGAGTACCTCTGACACTAGGA
TTTGAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAG
[G, A]

TCTTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGA
GGTGGGTGGGGTGGTTCATCTCTGAAAGCTGGAGGAAGGGGGTGTAGCACTTGTGAGGAT
TAATGAGATGCCTGTTTCATCCAGTTCCAAGCCTCCACTTGTTCCTATGTCTGCAATAT
ATTTCTTTCTGAGACACTTGGACAACCTATATTCCCCAAAGTTAGGCTATTGTGAGACAG
TCAAGCTGGGGTCTTCAGTGTTCACAAGTTACTTGAATGTTTCCAAGAGTCACCATAA

96501 AAAGGCTTGTTCAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATT
ATTTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATA
ATAATAATACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCAT
TTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTA
GGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCC
[A, G]

TGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGTGGTTCATCTCTGAAAGCTGGA
GGAAGGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCACAGCCT
CCACTTGTTCCTATGTCTGCAATATATTTCTTCTGAGACACTTGGACAACCTATATT
CCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTCACAAGTTA
CTTGAATGTTTCCAAGAGTCACCATAAACCTGCATAAAGTGAACTGTAGAGGCTCATT

97217 TTTTGCATATTTAAATCAAAATCCTGGTGAGTAAAGGAAATACAAGATGAGGAAGCCTAG
CCTGAACACTCATTTTAGAAATGGAAGCTGTAATTTAGATTATTATAAGAGGTTTGAATG
ATTAGAACAGAAAGATTGCAAAAGAAAGTATCCAGGTGACTCATTCCCGAAGGCAGAAAG
CAACCGTGAGTTCTGCAGGCCTGTGGGTGGCTGAATGATGGACTAACCATCAACGTTTTT
TTATCATGTTGCATTCCTAACCTGTCAATAACCATGGACCAATAACTCACTCATTGAAT
[A, G]

GATTCAGAAACAGGCCCCACATGATTTACCCAGATTTGGGAGAATGGTTAGATTACTGTC
TAGATACTTTTTAACATAAGATTGTAATATCAATTGGCACAATAATGAATATTAATTAAT
TTAGACTTTTACCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTTCCAGCAATA
CTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAAATTACTTAT
GTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATTTGAAATAC

97449 ACGTTTTTTTATCATGTTGCATTCCCAACCTGTCAATAACCATGGACCAATAACTCACT
CATTGAATAGATTGAGAAACAGGCCCCACATGATTTACCCAGATTTGGGAGAATGGTTAG
ATTACTGTCTAGATACTTTTAAACATAAGATTGTAATATCAATTGGCACAATAATGAATA
TTAATTAATTTAGACTTTTCATCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTT
CCAGCAATACTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAA
[A, G]

TTACTTATGTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATT
TGAAATACATATTAGTAGACCTGACTATAAAAAGATTCTCTTGATTCAAACATCCATCA
ATAAACTTTTAGCATCTTATTACCCTCAATGCAAGAGGTAGTTGGGTGGAGAGGTAGGAC
TCAGAGATGATGTGGAGTTCCCGTAAAGAGAGAAAAAGAACCATGAGGGCGAACTTC
ACTGGCGGTGGGGAGAGACAGCAAAAGCCTTCCCTTCCCTATTCTTTCTGTTTTTAGA

98167 GAGCCCATGGGTAAGACTGTGAAAAAGAGCTCTTGTCAAATCTAATAAGTGCAGTGGTG
ATTCTTCCCACGATTCAGGTCTCGCTAAACTAGACATGCCCATGATGCTTGGTGTTC
AGAAAAAGGTGGTATCACTTTTGTGAGAAATGAAATGAAAGTTCTGAGTGACCATGAA
TTTCCTAAAATGTGTTAATATCCAAGAAACCTTAAACCGTTTATAAGGGGAGAAGGAAG
AGAAGCAATGGAACAATGTTGCGAATTGTAGAGGGCTTTGAAATGAAGTTCTACTCCCT
[A, G]

AAGCTCATAAGGTGGGGGAATGTACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAG
TATGCTAATTTCTCTGCCACTCTCCCTCTTTTTCATATTTCTCACCAGGGTATGGGAATA
TTGTCTCCGAGCACTGAAGGAGGCAAAATCTTTTGTATTTTATATGCCATCTTTGGAATTC
CACTCTTTGGTTTCTTATTGGCTGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAA
GCATTGCAAGAGTGGAGAAGGTGTTTCGAGTGAGTACTGTGTCATATTAAATTC TAACC

98430 AATTGTAGAGGGCCTTTGAAATGAAGTTCTACTCCCTAAAGCTCATAAGGTGGGGGAATG
TACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAGTATGCTAATTTCTCTGCCACTC
TCCCTCTTTTTCATATTTCTCACCAGGGTATGGGAATATTGCTCCGAGCACTGAAGGAGG
CAAAATCTTTTGTATTTTATATGCCATCTTTGGAATTCACCTCTTTGGTTTCTTATTGGC
TGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAAGCATTGCAAGAGTGGAGAAGGT
[G, C]

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TTTCGAGTGAGTACTGTGTCATATTTAAATTCTAACCCTGCGATCCAATTGGCTTTAGC
CTGACAGGATCCAGGAGGCAGTATCAGGGGCATTGTCTGCTTTTAAATGGAATAATTTTAA
TGTTATGATTGATTTTTCTGTTTTGGCCAATGGAAGTCAAACATCTTGACCTAAACTC
CCTTCTTTGAGTAGCTTCTATTTTAGAGTGATATTTCTGCAATCACAACACAAGAGGGT
TAAGTATGGATTTGCCAACACAGATTTTTTGAAGAGGTGAGACAAGTTCAGTTTCTCCTT

98846 TTTAATGTTATGATTGTATTTTTCTGTTTTGGCCAATGGAAGTCAAACATCTTGACCTA
AACTCCCTTCTTTGAGTAGCTTCTATTTTAGAGTGATATTTCTGCAATCACAACACAAG
AGGGTTAAGTATGGATTTGCCAACACAGATTTTTTGAAGAGGTGAGACAAGTTCAGTTTC
TCCTTCAAGATGGAAGATGGGGTTCCTCATTGTGTTTGTAAATGATGTAGAAAACCTGAAA
TCCATCCATTTTTGTTGGAACTCCCTTACTCCGTTTTATTTTCAAGCACAGTGTCTTC
[T, C, A]
GGCTAATCCTGCTTCTTCCAGAAGCCTGACTTCTCCAGACACTGCTCTGTGCTTTGCACC
TGTCCTCAATGGTCTCTCTCTCTCCCATCTCTCACTGCTGAGTGCTCCCTCAGAAATGG
CATCCTGATGTACTACTTCTTACTGAACTGTTGATGATTGCTATTGCCTTAGTGGGTTTT
TTCCTTTCTGGAATATTTATCTTTAAACAAGAGACAACATCTCAACTCAAGGAATTTAT
TTACTAAAATTAATAATTAATAAATTATTCCTGGCATTAGTTGCAGGCATGAGTGGC

99326 TTTCTTTCTGGAATATTTATCTTTAAACAAGAGACAACATCTCAACTCAAGGAATTTA
TTTACTAAAATTAATAATTAATAAATTATTCCTGGCATTAGTTGCAGGCATGAGTGG
CTGAGTGATTAAACCGGGGTTCCCAATGCCCTTTAACTCGCACTCATTTGTATGCTTTCA
CAGAACACCTGTTTTGCTCAGATGTAAGGTCACTTCTGCCCTCTTACTCACCGCTGACCT
AATTTCTCAAGTCTTCAAACCTTCCTCAGGGAATGCTTCTTATGATGACTTAATATTTA
[C, A]
AAATGACATTCTGAGGTCTTTTCCAGGATCTAGGAATGGTGGCCAAAGGCAGATCAGCTG
GAAGCTCTAAAGCTGTGCTTTTTTCCCCCTCTAAGAACTCTTAACTTTGAGTTCAAGGC
TGTCCTCTGCAATAATGGCTCATACTTCTCTTTAGAAGAATGCAAGGGAGCTTTTCAAGTGA
GCAGTTTCAGAGGCTTTTTTAAAAGAGTAGAATGGGAGGAACGAGGCACCATAGCTGGGT
GAGCCATTTTATAATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATCCACAAAA

99514 CTGTTTTGCTCAGATGTAAGGTCACTTCTGCCCTCTTACTCACCGCTGACCTAATTTCTCA
AGTCTTTCAAACCTTCTCAGGGAATGCTTTCTTATGATGACTTAATATTTACAAATGAC
ATTCTGAGGTCTTTTCCAGGATCTAGGAATGGTGGCCAAAGGCAGATCAGCTGGAAGCTC
TAAAGCTGTGCTTTTTTCCCCCTCTAAGAACTCTTAACTTTGAGTTCAAGGCTGTCTCT
GCAATAATGGCTCATACTTCTCTTTAGAAGAATGCAAGGGAGCTTTTCAAGTGAAGCTTT
[C, T]
AGAGGCTTTTTTAAAAGAGTAGAATGGGAGGAACGAGGCACCATAGCTGGGTGAGCCATT
TTATAATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATCCACAAAAGGGGATAG
AATTTGAATCTACTTTGTGAGTTTTGGTGATGATTAAATGAAATGATGTGTGGAAGA
GCTTGTGATATAGGGCAGACATATAGAGCCAGGGCTTCTGTGTTTCTCTCAAGAGAAG
CCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGCTCTGTGGTGTGTGA

99680 TCAGCTGGAAGCTCTAAAGCTGTGCTTTTTTCCCCCTCTAAGAACTCTTAACTTTGAGT
TCAAGGCTGTCTCTGCAATAATGGCTCATACTTCTCTTTAGAAGAATGCAAGGGAGCTTT
CAGATGAGCAGTTTCAGAGGCTTTTTTAAAAGAGTAGAATGGGAGGAACGAGGCACCAT
GCTGGGTGAGCCATTTTATAATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATC
CACAAAAGGGGATAGAATTTGAATCTACTTTGTGAGTTTTGGTGATGATTAAATGAAAT
[G, A]
ATGTGTGGAAGAGCTTGTGATATAGGGCAGACATATAGAGCCAGGGCTTCTGTGTTTT
CTCTCCAAGAGAAGCCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGC
TCTGTGGTGTGTGAGTTTTACTGGAATGTCCACAGCCTTTGCTCCTTCATGCTGGCTGG
CCGGTGGCCTCATTAGACTGTGCACCTGGGCTCCCCAGTAGTCTCCATGGAACCATCAG
TGCTCAGCTTCCCTGCTTTTTCAGATGTTTAGTTCTTCTTAAACCAGACATAGCAGCCCTG

99879 AATCTCACTGATCCTGGGTGAGTGCCTCAGTTTACTCATCCACAAAAGGGGATAGAATT
TGAATCTACTTTGTGAGTTTTGGTGATGATTAAATGAAATGATGTGTGGAAGAGCTTT
GTGATATAGGGCAGACATATAGAGCCAGGGCTTCTGTGTTTTCTCTCAAGAGAAGCCCT
CATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGCTCTGTGGTGTGTGAGTTT
TACTGGAATGTCCACAGCCTTTGCTCCTTCATGCTGGCTGGCCGGTGGCCTCATTAGAC
[T, C]
GTGACCTGGGCTCCCCAGTAGTCTCCATGGAACCATCAGTGCTCAGCTTCCCTGCTTT
TCAGATGTTTAGTTCTTCTTAAACCAGACATAGCAGCCCTGTCTCCAAGAACTCTTTTGA
ACTTCTTGAAGCACCCTTTTAGCTGCTGCCTCATGGCCCTCTGACTTAGAGAAAAAGA

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ATCTGGTAGTTTGAACACTCAGAACAGGATTCAATTGGGGAAATGACTGATCTGGCATT
TTATTTTATGTAGCTTCTTTAGAGCTCAGTTTCCTTATTTGTAGAAGAAAGGATTGGAC

99971 AAATGAAATGATGTGTGGAAGAGCTTGTGATATAGGGCAGACATATAGAGCCCAGGGC
TTCTGTGTTTCTCTCAAGAGAAGCCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCA
TCTGAGGAGCTCTGTGGTGTGTGAGTTTACTGGAATGTCCACAGCCTTTGCTCCTTCA
TGCTGGCTGGCCGCTGGCCTCATTAGACTGTGCACCTGGGCTCCCCAGTAGTCTCCATGG
AAACCATCAGTGCTCAGCTTCCCTGCTTTTCAGATGTTTAGTTCTTCTAAACCAGACAT
[A, G]
GCAGCCCTGTCTCCAAGAACTCTTTGAACTTCTTGAAGCACCCTTTTAGCTGCTGCCT
CATGGCCCTCTGACTTAGAGAAAAAGAATCTGGTAGTTTGAACACTCAGAACAGGATT
AATTGGGAAATGACTGATCTGGCATTTTTATTTTATGTAGCTTCTTAGAGCTCAGTT
TCCTTATTTGTAGAAGAAAGGATTGACTAAAAGTTTGAATCCTCCTTAGCAGAAAA
AATTCTAGTTACTATATTTGAAGTATGGAAGAGGTTGCAATCATCTGGACATCTGCTAC

100895 TCCTGCAGCAGTTTGCTTGCTGCATGTAAAGTTTGGTAGAAAATCTCAGTTTCTGCCA
TTGATTTAACTACATTTAAAAGTCCAATTACGTTTAGGTGGTTATTTGAGAAATGAAAA
TTGTATAAGCTAACAAAGCTTGGGGTTGTGAATTTTAGTTCTCATGGGGGAAGGTTTAT
GTATTTCTTCTGCTCAATGAGTGTAAAGCCCTTCTCTGATCTGTTATGTTTCTCTCAG
CTCTGGGAAGAGAGGATTTACGGTGGAGTAAAAATAAAATCTAAAGTTGGCTTTCTGCC
[G, A]
GGCATGGTGGCTCACACCTGTAATCCTAGCAGTTTGGGAGGCTGAGGTGGGTGGATCACC
TGAGGTGAGAAGTTCAAGACCATCCTGGCCAAGATGGTGAAACCCTGTCAGTACTAAAA
TACAAAAATTTGCAGGGCACGGTGGTGCATGCCTGTAATCCAGCTACTTGGGAGGCGGA
GGCATTAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGTTGAGATCGTGCCACT
GCACTCCAACCTGGGTGACAGGGTGGAGCCCTGTATTAATCAATCAATCAATAAATAAG

100927 TTTGGTAGAAAATCTCAGTTTCTGCCATTGATTTAACTACATTTAAAAGTCCAATTAC
GTTTAGGTGGTTATTTGAGAAATGAAAATTGTATAAGCTAACAAAGCTTGGGGTTGTGAA
TTTTTAGTTCTCATGGGGGAAGGTTTATGTATTTCTCTGCTCAATGAGTGTTAAGCCCT
TCTCTGATCTGTTATGTTTCTCTCAGCTCTTGGGAAGAGAGGATTTACGGTGGAGTAA
AAATAAAATCTAAAGTTGGCTTTCTGCCGGCATGGTGGCTCACACCTGTAATCCTAGCA
[G, C]
TTTGGGAGGCTGAGGTGGGTGGATCACCTGAGGTGAGAAGTTCAAGACCATCCTGGCCAA
GATGGTGAAACCCTGTCAGTACTAAAAATACAAAAATTTGCAGGGCACGGTGGTGCATGC
CTGTAATCCCAGCTACTTGGGAGGCGGAGGCATTAGAATTGCTTGAACCCAGGAGGTGGA
GGTTGCAGTCTTTGAGATCGTGCCACTGCACTCCAACCTGGGTGACAGGGTGGAGCCCT
GTATTAATCAATCAATCAATAAATAAAGTAAATATAAAGTTGGTCTTCAAGATGCCTGAA

102805 AAAATGAACAGGATTACATAATTGTTTTGAGCTAATTATCCTTGAATACAAGGATCAATA
ACAAGGGTGATGCCAGTCCAAGTTGGACAGTCAGTTGCTGGGTAGATGTCTTCGCAGAA
ATGCTTTTCTGCATAACGAGGTGATGGGTTTGTGCAAGGTTGTAGTTTTCAGTCTTT
TATGATAGCTCTTTGTAATCAGGCATTTGTGCATGAGAATCCTTCCTTCTGGCTTTCCCT
GACTCTGTTTGTGAGAGTTTAAAGCACAAGTAACCCCATTTTGATTCTGACAATTTTCAT
[G, A]
CTCCCAACACTCATTAACAATGGGTTAAGAATTTGAACCCTTATCTCACATAGCAAGAAG
CCTGGAGGTACGTTGACTCAGGCTTGTGCTATCAGCTCCACAATGTCAGGTGTATCCAGA
TTTGTTACCTCTTTCTGCTCTGTTTTCTTGGCATGGTAGCTCTTCATCCTCAGACTGT
CACTCACATTGCAAGATGGCTGCTTCATGACCAAAATAGCACGTTTTACCCAACCTCATA
TCAGGAAATACAAAAGGAACCTCCCTTAAAATTTATCTTTTTTAGAGCAGTTGCATATTC

103462 CATGTGCAGTCTCCCTCATTATCAACATCCCGCACCAGACTGGTACATTTGTTACAATTT
ATGAACCTACATTGATGCATCATTATCACCTAGAGTCCATAGTTTACATTAGGGTTCACT
CTTGGTGTGTAGAGTCTATGAATTTGGACAAATTTATAATGACATGCGTCTACCATTAT
AGTATCATACATAGTATTTCACTCTCTTAAAAATCCTCTGTACCCTGCTTGTTCATCAAT
CCCGTTCTCTTAACCTTTGACAATGACTCATGTTTTATTAGTTTTGTCTTTTCCAGAAT
[G, T]
TCATTAATATGGTTTGGCTGTGTCCCCACCAATCTCAACTTATATCTCCAGAATTCC
CATGTGTTGTGGGAGGGACCCAGGGGAGGTAGTTGAATCATGGGGGCCAGTCTTTCCTG
TGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTTGATAGGCTTATCAGGGGTTTCT
GCTTTTGCTTCTTCTCATTCTTTCTTGTGCTGCCACCATGTAAGAAATACCTTTCACCTC
CCACCATGACTCTGAGGCCTCCCCAGCCATGTGGAAGTGAAGTCCAATTAAGCCTCTTT

FIGURE 3, page 92 of 107

103811 TCCCAGAAATCCCATGTGTTGTGGGAGGGACCCAGGGGGAGGTAGTTGAATCATGGGGGC
CAGTCTTTCTGTGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTGATAGGCTTA
TCAGGGGTTTCTGCTTTTGCTTCTCCTCATTTTTCTCTTGCTGCCACCATGTAAGAAAT
ACCTTTTACCCTCCACCATGACTCTGAGGCCTCCCAGCCATGTGGAAGTGAAGTCCAA
TTAAGCCTCTTTTGTGCCAGTTTCAGATATGCTTTATCAGCAGCGTGAACCGGACT
[G, A, T]
ATACAGTTGTGTAGTTGGAATCATACTGTATGTAGCCTTTTCAGACTGGCTTATTTCACT
TAAATATGGATAAAAAGTTTCTCTATGTCTTTTCATGGCTTGTAGTCCATTTCTGCTGGG
TGGTGAATAATATTCCATTTCTGGGTGTACCATAGTTTATGTATCCATTACCTACTGA
AGGACATCTTGTGTCTTAAGTTTGGTAATTACGAATAAAGCTGATATAAACCTCTG
TGCACAGGTTTTTGGTTGAACATTAGTTTTCAACTCCTTTAGTTAAATACAAAGATGTG

105461 CCTGTGCCATTTGTTGAAAAGACCTTTTTTTTTTCTCCATGTTGTCGCCTTTGCTCCT
TTGTCAAAGGTAAGTTGACTATATTATGTGGTTCTATTTTGGGCTCTCTATTCTAGTTC
ATTGACCTATTTGCTATTCTTTCTCCAATATCATACTGTCTTGATTACTTTTCGCTCTAT
AGTAATTGGAGACGGA
GTCTCGCTCTGTGCCCCAGGCTGGAGTGCAGTGGCAGCATCTCGGCTCACTGCAAGCTCC
[G, C]
CCTCCCGGGTTACGCCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGCGC
CCGCCACTACGCCCGCTAATTTTTTGTATTTTAGTAGAGACGGGGTTTACCCTTTTA
GCCGGGATGGTCTCGATCTTCTGACCTCGTGATCCGCCCGCTCGGCTCCCAAAGTGCT
GGGATTACAGGCGTGAGCCACCGCGCCCGGCCACGCTCTATAGTAATTCTTAAAGCCAGT
TAGTGTCACTCCTCAATTTTTTCTTCTTTTCAATATTGTGTTGACATCAGCTCCTTT

105981 ATAGTAATCTTAAAGCCAGTTAGTGTCACTCCTCAATTTTTTCTTCTTTTTCAATAT
TGTGTTGACATCAGCTCCTTTTATGGAAGAAAAATCTTCCAGAAGTTACCCTGTAGAT
TTCCCTTCTGTCTCATTGACCAGAATGAGATCACATTAGCATCTGCAAGGGAGGATAGG
AAAGGAAGTATCGGACAAAGGACGATAGTATTGCCATAATGGACCAGTGATTCTCAAAGT
TTGGTCCCTCAACCTTAGGCATCAGTATCCCTGGACCATCGGCATCGGCATCCACTGGA
[A, G]
ACTGTTTGAATAAGAAAATTATTTTGGTTCGTGGTGGGGCGGTGGGGCTGGAGCTCAGC
AATCTGTGTTTACCAAGCTGTCCAAGTGATTCCAATGCTTAAGGAGCAGAGGAATCATGT
TTCATCTCTTGGGGCTGAACACATTGCTGTGATGAACAAAATTAGAATTCTGTTAGCGAA
GAAGTTGGAGTAAGCAAATGATAACGTCTCACATAGATGTCAATTAAGTCTAGCCACTG
AGATCACTCATAGAGAAGATGTCTTCACTCTTCTTGTCTATAAATTAGGTGGCTGTTGGG

106495 TAGATGTCAATTAAGTCTAGCCACTGAGATCACTCATAGAGAAGATGTCTTCACTCTTC
CTTGTCTATAAATTAGGTGGCTGTTGGGATCCTTGAATCAATCAAGATAAGCTAGCCTATC
ACAAACAGCCTACTCCCACTCCTGCCAGATCTGCTGCAACCCAGGCAGCTTCTCAGGCTC
AGGGGCTAGATAGGGTGGGGGAAACAGCTGAGCGCTGCTTGGTGGCTTTCAGAGCGTTG
TCCCTCAGGTAGAGCCATTGGCCCGAGCTAGTTACCAGGTCCCATTCGTAGCTGCAAG
[G, T]
GGGTTTGAATGCATTCTTTTATCTCCAAGAATAGTAGTGGATGGTAAAATTGTTGCGCA
CTGTTATAGTCATGTTTATATGCTCTAAGATGCACTCCTGGGTCCCACTCTAGGGTGACC
AGCCTTTCAGGAATTTAGTTCCAGGTCGTTTGTGCACTCTTCGGGGGAATACTACT
ATTGTGAGACTCATAGATTTACACCTGAGAAAATGGAGCCTGTGAGGTGACTTGCTTGG
ATCCACACAGTGAATTGGTGGTAGGACCTGATTAGAACCCTAATCCTGCCTTAACCTC

107077 CTAATCCTGCCTTAACCTCTTCCAGATGGGCTGAAAATATTAATGTCAGATTAATCTACA
CCATGAAACCAATGTGGAGTTTAGAATATTTTAGTATACCATACTAATTAAAGTAAAAAT
AATTCTTCTGAGTTCCAGGGAAATATCTGGGCAGTTAGCATCCCAAATATCTGCTTAT
TTGGGATGAAGGAGGGCTGACATTGGATTCTGAAGCAGGTTTGGGAAGCAGGCGGCTCT
TTCTCCCCTGCTGTGGGGTAGCTGTCTTGTCTGGGCCAGGCTGATTATCACTTGATAGGAT
[G, A]
CTGTAGGAAAACAGTCAAATCTGGACTGATTCTCATTTTCTTGGCTCCAAGCTGGACT
TTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTCCGGCTCGGATCAGCAGGCTTTCTG
GTATTTCTGTGTAACCAAGGGACACCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGCTTT
CCCCCGCCCCAAGGATATGGCAGAAATGTTTATTTGCTTATGGATCCAAATGATTCTGG
GTGTCACTGACAAATAATAAACATTACCCTAGACTTACGAGTGCCAAAATTACTTGGAA

107431 CTGGACTTTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTCCGGCTCGGATCAGCAGG
CTTTCTGGTATTTCTGTAAAACCAAGGGACACCTTTTTTTTTTTTTTCTTTTCTTTTTT
TGGCTTTCCCCCGCCCCAAGGATATGGCAGAAATGTTTATTTGCTTATGGATCCAAATG

ATTCTGGGTGTCACTGACAAATAATAAAACATTACCCTAGACTTACGAGTGCCAAAATTA
CTTGGAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC
[T, G]

AATACGGTTAAATTAGTGGACTGATCAACCACTTTAGATTCCAGGAAGGGGCATGTGGCG
GAAGCCAAAGACTCCTGCAGGCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTTT
TAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCCAAGGCATCTTGAGCTAGCATTC
GCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCACA
TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA

107671 CTTGGAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC
TAATACGGTTAAATTAGTGGACTGATCAACCACTTTAGATTCCAGGAAGGGGCATGTGGC
GGAAGCCAAAGACTCCTGCAGGCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTT
TTAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCCAAGGCATCTTGAGCTAGCATTC
AGCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCAC
[A, G]

TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA
AGACCAGCCTGGGCAACATAGTGAGACCCCATCTCTGAAAAAAGAAAAATCGAGCCC
GGGCGTGGTGGCTCATGCCTGTAATCCAGCACTTTGGGAGGCAGAGGCAGGCAGATCAC
TTGAGGTGAGCAGTTTGAGACCAGCCTGGCCAACATGATGAAACCCGTTCCTACTAAAA
ATACAAAATTTAGCCTGGCATGGTGGTGTGTGCTTATAGTTCTAGCTACTCGGGAGGCTG

108826 CCATATGTCTCTGGAGTATCTGCTTCTATGTGCCTGCCCTAGTACATACCATATTAT
AAGTTCCTAACAACTAACTCAGTAGGATTAATGTTACATAATAATGTGAGTTTATTTATT
TATTTATTGAGACGAGTCTCACTCTGTTGCCAGGCTGGAGGGCAGTAGCATGATCTCG
CCTCACTGCAACCTCCGCCTCTTGGGTTCAAGCGACTCTCCTGCCTCAGCCTCCTGAGTA
GCTGCGGCTACAGGCGCTGCCACCATGCCTGGCTAATTTTGTATATTTTAGTAGAGA
[C, T]

GAGGTTTCACCATATTGGCCAGGCTGGTCTCGAACTCCTTACCTCGTGATCTGCCACCT
TGGCCTCCCAAAGTCCGGGATTACAGGCATGAGCCACCACGCCCTGCCGTGAGTTTATT
TTTATCAGAGAGAAGGCCCTGGTTTAAATGTAACAATTGCTTTCTTCTTTTCCTAGGC
GGCAAGAAGGTAGGAAGTAATTATTTGAAAATGCAAATAATTTTAAAGCTTTATCAATCA
AGTCTGTTCCAAATTAGTTTAAAGATTTTCTGTAGCTTAAATGATAGGGCCAGAATGTAC

111310 TAAAAGGATTTTAGTTTTCTGACTTCATGCTCTCTCTCAGTGTGTTGAATTGCATCATAG
CCTCTGTTTCTTTATGTATCTGCTTTAGTTCCCTAATACCAGCTCATTATTAGTTAATAT
CTCTTTCTTTGTGTTCTCTTTCTTGGAGGTTAATCTAAGATTTAGGTGTCCCCTTGCTC
ATGCTCTGCTATGTGACTAATACAAAGATGGGTTTATATTCTGGTATCACTATAGGAC
ATTAAGTAATGTCAAAAACCACAATTACTTTTGTACCAACCTAATAAAGAGGGGCT
[T, A]

TACTGTACCAATAGCTGACTTGTTTTGACCCACCTCTGCGAGAGCAGTTGCCAGGCAAAG
ATAGTCCCCACTCTGTTCTTCCATCCACTGCTCTACTTTGTACAACCTGCTTAATGTTAA
AAACAGGAGGAAATGCACAGCTCAAAGCCAAGCCTCTGGTGGCCTGAGATAGCTGGCCT
TGCTCTCAAGCATTTCTTTTCTGGGCTCATCAGAATGCCCTCAATGCTCTGCTCG
ATGGTTTAAAGCATAGAGTGGCTTGGTGTGGTGAATCAAGCCTGTAATCCAGCACTT

112035 CCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCA
GTGAGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAAACTCTGTCTCA
GTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAAATAAAAG
AGCATAGAGTTTGAGACCATCACCACCAAGATTTTAAATCCCACTGGGGATTTAACTCAG
TCCTAAACTCAAGTCTGCTATGTCAAGTAGTATTAATATCTCTTCTTTTAAAGAGCCA
[T, -]

TTAGCTCTTTCTCATATCTTTTCAAGATTTTGTGCTGGTTTTCCCTAAGGCTTCTGAACTCT
TAAAACATCTCTGATAGAGGAAACTATCTAGAAAATTTATGGGTATTCATTATCAGTGA
GGTCTTTCTCATTGAAGAGATAATCACTTCTTAGAATCCAGGGGTTTCATTAAAGTATTA
ATAAAGGTTTTATATTTTGCATTTTGGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTC
TACAACATGGTAACTGTATTTAAAGATTCAGGTGCTTTTGAGTTATGAATTTAATGCA

112038 AGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTG
AGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAACTCTGTCTCAGTA
ATAATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAAATAAAAGAGC
ATAGAGTTTGAGACCATCACCACCAAGATTTTAAATCCCACTGGGGATTTAACTCAGTCC
TAACTCAAGGCTGCTATGTCAAGTAGTATTAATATCTCTTCTTTTAAAGAGCCATTT
[T, -, A]

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GCTCTTTCCTCATATCTTTCAGATTTTGCTGGTTCCTTAAGGCTTCTGAAACTCTTAA
AACATCTCTGATAGAGGAACTATCTAGAAAATTTATGGGTATTCATTATCAGTGAGGT
CTTCTCATTGAAGAGATAATCACTTCTTAGAATCCCAGGGGTTTCATTAAGTATTAATA
AAAGGTTTTATATTTTGCATTTTGGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTCTAC
AACATGGTAAACTGTATTTAAAGATTCCAGGTGCTTTTGAGTTATGAATTTAATGCAAGA

112066 TCACTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCCAAGATCACACCACTGCACTCCAGC
CTGGGCAACACGAGTGAAACTCTGTCTCAGTAATAATAATAATAATAATAATAATAA
TAATAATAATAATAAAGTAAATAAAAAAGAGCATAGAGTTTGAGACCATCACCACCAAGA
TTTTAATTTCCCACTGGGGATTTAACTCAGTCCTAACTCAAGGTCTGCTATGTCAAGTAG
TATTAATATCTCTTCTTTTAAAGAGCCATTTAGCTCTTTCCTCATATCTTTCAGATTTT
[G, T]
CTGGTTTTCCCTAAGGCTTCTGAAACTCTTAAACATCTCTGATAGAGGAACTATCTAG
AAAATTTTATGGGTATTCATTATCAGTGAGGTCTTCTCATTGAAGAGATAATCACTTCT
TAGAATCCCAGGGGTTTCATTAAGTATTAATAAAAGGTTTTATATTTTGCATTTTGGGG
CTAGTGAAAGTCTAGTGATGCTTTAGGTCTACAACATGGTAAACTGTATTTAAAGATTCC
AGGTGCTTTTGAGTTATGAATTTAATGCAAGAATTCTATTAGCAATCACATTTTACTAG

114098 AAGTTGAGATCACTGGTCTTTCAAGTTAGCATCAATTTCCATGACATTCTGGGCTTTCTT
TTTTCTGTGGATTAAACATTTTCATCCTGGCCATAGTCATTGTTACAAAGATTTTTTTTT
TTTTTTTTTGAGATGAAGTCTAGCTCTGTTGCCAGGCTTGACTGCAATGGCACAGATCTC
GGCTCACTGCAACCTCTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGT
AGCTGGGATTACAGGCACCTGCCACTGCCCTGGCTAATTTTTGTATTTTGTAGTAGAGACG
[G, A]
GGTTTCACCATTTTGTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTC
GGCCTCCCAAAGCACTGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTTCTT
TTCTCTAAGTTACTCCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCT
TTATGCCTTTTTTTAATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTT
AAGTGTACAGTTCAGTGGCATTAAGTACATTACATTGTTGTGCAACCATCACTACCATC

114293 CTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGG
CACCTGCCACTGCCCTGGCTAATTTTTGTATTTTGTAGTAGAGACGGGGTTTACCATT
GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCCTCCCAAAGCA
CTGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTTCTTTCTCTAAGTTAC
TCCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTT
[A, -]
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGTACAGTTCAG
TGGCATTAAGTACATTACATTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTTT
CCATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACCACTCCGGGAAC
CTCATGTCAATGGAGTCATATAGTGTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCA

114413 GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCCTCCCAAAGCA
CTGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTTCTTTCTCTAAGTTAC
TCCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTT
AATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGTACAGTTCAG
GTGGCATTAAGTACATTACATTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTT
[-, C, T]
CCATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACCACTCCGGGAAC
CTCATGTCAATGGAGTCATATAGTGTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCA
CAGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTGAGAATTTCTTCTCTTCAAGGC
TGAGTAATATCCCCCTGTCTGTATATACCACATTTTGCCTATTTGTTTATCTGTTGATGG

114414 TCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCCTCCCAAAGCAC
TGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTTCTTTCTCTAAGTTACT
CCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTTA
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGTACAGTTCAG
TGGCATTAAGTACATTACATTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTTT
[-, C]
CATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC
AGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACCACTCCGGGAAC
TCATGTCAATGGAGTCATATAGTGTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCAC

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AGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTGTCAGAAATTCCTTCCTTTCAAGGCT
GAGTAATATCCCCCTGTCTGTATATACCACATTTTGCCTATTTGTTTATCTGTTGATGGA

114692 TACCATCATCTCCAGAACTTTTCCATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAA
TAACTGCTCATTTCTCTCCCCCAGCTCCCTGGTGACCACCATTCTACTTTCTGTGTCTA
TGAATTTCAACCACTCCGGGAACCTCATGTCAATGGAGTCATATAGTGTGTTGTCCTTTGT
GTCTGGCCTATTTCACTTAGCACAGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTC
AGAATTTCTCTCTTTCAAGGCTGAGTAATATCCCCCTGTCTGTATATACCACATTTTGC
[C, T]
TATTTGTTTATCTGTTGATGGACTTTTGGGCTGTTTCCACTTTTGGTTGTTATGAATAA
TGCTGCTATGAACATGGGTGTATAAACATCTATTCAAGTCCCTGTTTTAATTATTTTGG
ACATATACCCAGCAGTGAATGTGCTGAGTCACATATAATTACAGATTTAATTTTTCTGAG
GAACCGTGACACTGTTTTCTACAGTGGCTGCACCATTTCACATTTCCACCAACAATGCCC
AGGGATTCTGTCTTTCCACTTCCTCACCAACACTTGCTTTTTTCTGTTTTTTTTTTTTTT

115696 GGTCAACTTGATAAACAATTATCGAATAACACTTTTTTGTGTGTGTTCTCAACACTATAG
GGATATGTGGCAATAAACAAGGATAGTCCTTTCTCTTAAGGAGAAAACAGCCATGCATC
AAGACCAGTGTCCATAATATTGTGAGAATGATACCAGGGCTAGGGCAGGCAGGCTCTGA
AGTCACACCACCTTGGGTGAATGATCCATGCTATGTCTACTTCTTATCAGCTATGTGACC
TCAGGCTGTGCCTCAGTTTTCTTATTGAAAAAATGAGGATAAATGGTTCTGTCTGT
[A, T]
TTGGCACTTAGTTGACACTTGAGAGCAGTGTCTGCCACATAGCCTCAATCAATGCTATTCT
ACTATTATTGTAGAACACTGTTAGCTATGGGAGCCCAGAGAGGGACTTGTTAAGTCTAGC
TTGTATATTTTACATCACACAAGCACTGCCTTGTCTTGCCAATGGATTGTTCTGTCTCAA
GTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTGCCTTTATTGGCCTGTATCCCTGTA
GGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTTCAAGTAATATTTATTGATTGTGAATT

116153 TTGCCAATGGATTGTTCTGCTCAAGTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTG
CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACGAAACCAGGTCTTTTT
CCAAGCAGCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT
GTCTTACCCTTCTGGAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC
[A, C]
CAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGACG
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA
GCCCTTTCGAAAGGCAACAGCACAAGCAAGAGTGACAGCGGAGGTTTCGTGCGCTCCTC
TGGGGCTCCCCCAGGGGATGCCGTTGCCATTCCGCTGCGTGAAGGAGGCAGGTTGCTCTT
CTTCGTCGTGCGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC

116213 CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACGAAACCAGGTCTTTTT
CCAAGCAGCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT
GTCTTACCCTTCTGGAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC
ACAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGAC
[G, A]
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA
GCCCTTTCGAAAGGCAACAGCACAAGCAAGAGTGACAGCGGAGGTTTCGTGCGCTCCTC
TGGGGCTCCCCCAGGGGATGCCGTTGCCATTCCGCTGCGTGAAGGAGGCAGGTTGTCTT
CTTCGTCGTGCGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC
TTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGTGAGAATT

116507 TGGGACGGGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGAT
GCAGCGAGCCCTTTCGAAAGGCAACAGCACAAGCAAGAGTGACAGCGGAGGTTTCGTGCG
GCTCCTCTGGGGCTCCCCCAGGGGATGCCGTTGCCATTCCGCTGCGTGAAGGAGGCAGG
TTGTCTTCTTCGTGCTGCGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCA
TGTGATCTTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGT
[G, A]
AGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCGCTGCTTACCAGATCT
TGAAAAACAAGGGCCAGTTTGTATTTTATAAAAAATGCATCAAAGTGTTACTAAAAGATCC
TAAAGGAAGACTAAAGTTTCTCCGAAAAGAAGCCTGGCCCTTCAAATACCAACAAGGGA
TCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTTCTGTTTAGATACTGTATT
ATTACATCATTTCCCTCTCAGATTGAGTGATGTTTCTCCATTATTTGTTCCGTTCCCTT

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116796 CAAGAATGAGTGAGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCCGTGCT
CTTACCAGATCTTGAACAAGGGCCAGTTTGTATTTTATAAAAAATGCATCAAAGTGTT
ACTAAAAGATCTTAAAGGAAGACTTAAAGTTTCCCTCCGAAAAGAAGCCTGGCCCTTCAAAT
ACCAACAAGGGATCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTTCTGTTT
AGATACTGTATTATTACATCATTTCCCCTCTCAGATTGAGTGATGTTTCTCCATTATTT
[G, T]
TTCCGTTCCCTTGGCAGAAGTGAATTTACCATGAACAACATCTGCAGTCTTTCTATACGA
GCCTGGGGAATGCTTGAAGAAGTACTATAAATTATTATTATTAATATTTGTTTGTCTA
CCTATCCACTCCCCACCCCAAGTCCCCTCTCACTCCCGAGTAGTCACAAATGGGTGTAT
CGGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTCTAAACTATTTTGCAGATT
AGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAATAAAAGGAATTTATC

117142 AGTCTTTCTATACGAGCCTGGGGAATGCTTGAAGAAGTACTATAAATTATTATTATTA
ATATTTGTTTGTCTACCTATCCACTCCCCACCCCAAGTCCCCTCTCACTCCCGAGTAGT
CACAAATGGGTGTATCGGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTCTAA
ACTATTTTGCAGATTAGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAAT
AAAAGGAATTTATCTACAATTTGAAAATAGATTACAGAGAAGTCCATGTGATTTTTTT
[T, A]
AAAAAATAAATTTTGTCTGTGTACTATAACAGAGTTGGCACCAGAGCTAACAAAAAAAAG
CAAGTATCAACATTTAAATGCAGTACATGACATGTAAATGCCATATGGTATTCTTGCAA
TGTTATTACCACTTTCTTTCTGGCATCCTTTTCTGACATTGCTGTATGCTTCTTGACTC
TGCTGCTCTTCAGAAAGCCTCAATTGTCTGAGCCCTTAAATTCTGATTTATATTAGGT
GTCTCTCTCTTTTATCTACCCTTTGGAGGCTTATCAACCTTTTCCCAAGGAAGAGGAAG

118270 GCAAATAACATCTTGTAGACCCCAAGAATAACATTCATCTCACTGTATTGATGGTGGGCA
TCCCCATCAGCCTATGAGTTGTGTGAGGTCTGGGTCCCCTCTGCCTGTTCACTGCATC
TTCAGGTGCTAGCACATGGCCTGGAACCCAGAGAGCACTTAATCCATACTTGATGAATCA
ATGAATGAACATTGCTAGACATAACCTTATACATCTTGATATAGAAAATGACCTTGAAGC
TGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAGCCAGCTTGGGCAGC
[G, C, A]
TAGTGAGACATCCCCCTATCCCTCCTACTCTCCTAATCCTGCACAATCCCCCTCTAAAAAA
AGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTGTAATCCAGCACTTTG
GGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCCTTGGCTAACATGGT
GAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGCGGATGGCGGGCCCTG
TAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAACCTGGGAGGCGGAGCT

118495 AAATGACCTTGAAGCTGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAG
CCCAGCTTGGGCAGCATAGTGAGACATCCCCTATCCCTCCTACTCTCCTAATCCTGCACA
ATCCCCCTCTAAAAAAGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTG
TAATCCCAGCACTTTGGGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCA
TCTTGGCTAACATGGTGAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGGC
[C, T]
GATGGCGGGCCCCCTGTAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAAC
CTGGGAGGCGGAGCTTGAGTGAGCCGAAATTGCACCACTGCACCTCCGGCCTGGGCGACA
AAGTGAGAATCTGTCTCAGAAAAAAGAGAGTGACCTTGAATCGAA
ACTAGTATTGTATGCAATAAATGGCAATGGGGAAAAAAGTTCTTAGGCTTTGAAGTCC
AATTATTTTGAATAAAAGATGGGTCTGTAGGGAGCTGCTCCCTGCTAATGCTTATTGCCA

119314 AGATAATTCTGAAAAATTCAATGCAAATTTTCTAGCTATAATATAAAGGAGAAATAAATG
GAAAGTAATGTTTCAATAATAGGTGCTCTGTTATGAAACCCTAGGAGACCTGCTGAAGCA
GTGAGTCTTGGCATCTATACGTAGAATGCAATATCTCCAAATGCAGATTGGTTCAGGTAT
GTTGTGTTGATGACTAAGATGTCACAAAGGACTTTTTCTCCAGTGGTGTGGTTTTCCAAA
ATAGAGAACAACCTCTCAGCAAGGTTCCAGCTAATCTATTTACATTAGAGTCAGATTCTTA
[A, T]
AAAAATTTGGTCAACTTTGAAAAGATGCAACAATTTGTGTGTGTCTTACATGTAAAA
GGGAGTTAGGTTCTTGGCTCAGATAATTGTAGACATGAGTTTTTCTCAGTGGGACATTCA
AAGCTCATGCTTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAAG
ACATCTGAACGTCTTTGACCTCCTCCAGTACATGCCAAACGTGCCCTCCAGTTGTGAC
AACCAGAAACACCCTAACAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAACAGG

119740 CATGCTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAGGACATC
TGAACGTCTTTGACCTCCTCCAGTACATGCCAAACGTGCCCTCCAGTTGTGACAACCG
CAACACCCCTAACAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAACAGGGTTAT

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AAACAGAGCTTCCAGGGGGCTCCCATGTAACTTTCAAGAATTACATATTTAATTTCTAT
TCTCGTGAAAAATGGCCATGTTCCAATAGTTAAGCCTCTTCCCTTGATGTATTTCCCATGC
[T, C]

ATTAATATTCAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCAT
CTGACTATACCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTC
AGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAG
TACTCTCATATTTCTTGAGGTGCTAAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTAC
GGGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGG

119899 TTGTAATCTAAACAGGGTTATAAACAGAGCTTCCAGGGGGCTCCCATGTAACTTTCAAGA
ATTTACATATTTAATTTCTATTCTCGTGAAAAATGGCCATGTTCCAATAGTTAAGCCTCTT
CCCTTGATGTATTTCCCATGCCATTAATATTCAGTTCTATTCCACAAATATTTATTATAT
GCATATGTGTGTGTACATCCATCTGACTATACCTTTCTATGTTATGTACCTTTACTAGAA
TTCCAAATTATAAAATCCTGTCTAGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTT

[G, A]
TAGAATATTTGCTTTAAACAGTACTCTCATATTTTCTTGAGGTGCTAAAAATAGAGGAGGC
AGCTGTAGAAAAATGCACTACGGGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACT
TTGTGAGGCCAATGTGGGCGGATCATGAGGTCAAGAGATTGAGACCATCCTGGCCAACAT
AGTGAAACTCCATCTTACTAAAAATACAAAAATTAGCTGGGCATGGTGGTGCATGCCTGT
AGTCCCAGCTACTCGGGAGGCTGAGGCAGAAGAATCACTTGAACCCGGGAGGCAGAGGTT

119990 ATGGCCATGTTCCAATAGTTAAGCCTCTTCCCTTGATGTATTTCCCATGCCATTAATATT
CAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCATCTGACTATA
CCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTCTAGTTTATCT
CTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCAT
ATTTTCTTGAGGTGCTAAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGGC

[G, A]
TGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAGGT
CAAGAGATTGAGACCATCCTGGCCAACATAGTGAAACTCCATCTTACTAAAAATACAAAA
ATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCAGCTACTCGGGAGGCTGAGGCAGAA
GAATCACTTGAACCCGGGAGGCAGAGGTTGAGTGAGCCGAGGTACGCCATTGCACTCC
AGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAAGAAAAGAAAA

120169 TCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCA
TATTTTCTTGAGGTGCTAAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGG
CGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAG
GTCAAGAGATTGAGACCATCCTGGCCAACATAGTGAAACTCCATCTTACTAAAAATACAA
AAATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCAGCTACTCGGGAGGCTGAGGCAG

[A, G]
AGAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGGTACGCCATTGCACTC
CAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAAGAAAAGAAA
AGAAAAGAAAAATGCACTGTGCCAGGCATTAGAACATTGAGATGAAGGAGCACACTGTG
TAGTAGGGAGACACATGGATGGATGGACAGACAGTATGACAGGTTGAGCAGTTCTATGGA
CAGGGGACCATGCAAGGGTGAAGGAACATGGACAGCAGAGAGCAAGAACTGGAGAGGGCT

120519 CCATTGCACTCCAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAA
AAGAAAAGAAAAGAAAAGAAAATGCACTGTGCCAGGCATTAGAACATTGAGATGAAGG
AGCACACTGTGTAGTAGGGAGACACATGGATGGATGGACAGACAGTATGCAGGTTGAGC
AGTTCTATGGACAGGGGACCATGCAAGGGTGAAGGAACATGGACAGCAGAGAGCAAGAAC
TGGAGAGGGCTTCTGCAAGAGGTAATGTGAGAATTGTGTGTGAGGAATGAACAGGAGTC

[C, T]
GACAAGCATTAAAAAGGGCGAAGAACCTTATCCTAGCAGATGGAACAGCCCTTAAAGGG
CACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAATGCTAAAT
GCATATTGCTGCGTGAAGAAGCCAATCTGAAAAGGCTACATGCAGTATGATTCCAACTA
CATGACATTCTAGAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGATTGCCAAG
AGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTATGGCTAGGGAAAC

120812 AGGAGTCCGACAAGCATTAAAAAGGGCGAAGAACCTTATCCTAGCAGATGGAACAGCCCT
TAAAGGGGCACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAA
TGCTAAATGCATATTGCTGCGTGAAGAAGCCAATCTGAAAAGGCTACATGCAGTATGAT
TCCAACTACATGACATTCTAGAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGA
TTGCCAAGAGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTATAGGCT

[A, G]

GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA
 CCCATAGGATGTACAGCACCAACAGTGAACCCTAATGTATACTATGGATTCTGGATGATA
 TTGTCAGTATAGGCTCATCATTGTAACCAGTGCCTACTCTGGCATGGGATGTTGATAG
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCT
 TAATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGAAAAAGGCACTGAA

121053 TGCCAAGAGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCTA
 GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA
 CCCATAGGATGTACAGCACCAACAGTGAACCCTAATGTATACTATGGATTCTGGATGATA
 TTGTCAGTATAGGCTCATCATTGTAACCAGTGCCTACTCTGGCATGGGATGTTGATAG
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCT
 [T, C]
 AATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGAAAAAGGCACTGAAG
 TATAAATGGAGCAGTATTGGGGCACCAATAAACCATCCAGTCTCTCCAGAACTGCAAAAC
 TAACTGCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGGTAGGG
 GGGAGTTGGGGGAAATGGCGGGGGGTGGGGTCCCTGACAGTTTCTCAGAACTGGGTTG
 ACGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTCTC

121246 CTCATCACTTGTAAACCAGTGCCTACTCTGGCATGGGATGTTGATAGTGGGGAAGGCTGT
 GCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCTTAATTTTGCTGTG
 AAGCAAAAATGGTTCTAAAAAATCAAATCTTGAAAAAGGCACTGAAGTATAAATGGAG
 CAGTATTGGGGCACCAATAAACCATCCAGTCTCTCCAGAACTGCAAACTAACTGCTACTA
 CAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGGGAGTTGGGGG
 [G, A]
 AATGGCGGGGGGTGGGGTCCCTGACAGTTTCTCAGAACTGGGTTGACGTATTCTGGAG
 GAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTCTTGAAGTGGATCAT
 GGCCAGGTCTTACAGCTCTCCCACTGCCACCTTTGGCAAACATTCTGGGATCCTGAAG
 GCTCAGACAAGGCCCATCCCTCTTATGTTACCATGGGGATTATCTCTTCTCTCTTTCTC
 TTTTAGTTTCCCTCCAAGGAAGGTTGTCACTCCTTTTCCAAAAGGAAGAAGGACCAAG

121475 AACTGCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGG
 GGAGTTGGGGGAAATGGCGGGGGGTGGGGTCCCTGACAGTTTCTCAGAACTGGGTTGA
 CGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTCTT
 GAACTGGATCATGGCCAGGTCTTACAGCTCTCCCACTGCCACCTTTGGCAAACATTCTC
 GGGATCCTGAAGGCTCAGACAAGGCCCATCCCTCTTATGTTACCATGGGGATTATCTCTT
 [C, T]
 CTCCTTTTCTCTTTTAGTTTTCCTCCAAGGAAGGTTGTCACTCCTTTTCCAAAAGGAA
 GAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGTGTTATTTCTCGAGGGAACCTCTG
 CCATGTTCTTGAGCATGTTGCTCGTTTCTCCTTCCCTTCTCTTCTAGCCCTCTCCCTC
 TCGTCTCTCCTACCTCTCCCCCTTTTCTTTTCTTTCATCACAAGACTACAAAGAGT
 ATACATGGTCACTGTAGAGGCCTTGGAATGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT

121715 GGGATCCTGAAGGCTCAGACAAGGCCATCCCTCTTATGTTACCATGGGGATTATCTCTT
 CCTCCTTTTCTCTTTTAGTTTTCCTCCAAGGAAGGTTGTCACTCCTTTTCCAAAAGGA
 AGAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGTGTTATTTCTCGAGGGAACCTCT
 GCCATGTTCTTGAGCATGTTGCTCGTTTCTCCTTCCCTTCTCTTCTAGCCCTCTCCCT
 CTCGCTCTCTCCTACCTCTCCCCCTTTTCTTTTCTTTCATCACAAGACTACAAAGAG
 [T, A]
 ATACATGGTCACTGTAGAGGCCTTGGAATGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT
 CCTGTAAATATCCTTTGTCCAAGAAATCCACCACTAACACGTTGATAATCGTACTTCTG
 AATCTTTTCTCTGCATCTACATTTGGCCCCAATGCCTGGTGTCTCCACTGGCCCCACAGTA
 CCCCTCCCACCTGTACCTACCTGTCCAAGTTTCCCTGCCCTCGGGTACTGGCAGGGGT
 GTGACCGTGTCTGCCACAGCCTGTGCCTTCCCTGTGTTACTCCATCAGCTCCTTCTG

122390 TTCTGCCTCAGAAGGGGGAGTGCTACTGCTGCTGCTTAGAGCTGAGGGAGACGGACA
 CCACTCTCCCCGTAACACTAGATTCTCAGGAATAGATACAACACCTTCCAACTGCAGC
 TGACACCAGCTGTACATTGTAACAAGACTTTTAAGATTAGGAATGTCAGAGAGATATTA
 CCCACAGCAGTTACATCACATCTGCTTACAGTCTGGCTGTTCTTGGAGCCAGAAATCCA
 GGCCTGTTCCAGGGTGTCCAATTGAGCTGTGCTTACCTGCCTCGAGGCAGCTGAAGC
 [C, A]
 AGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGGCAGGCAGCTTAGCTCAAAATGAGAG
 AAATATGGCTAATTTAAACAAAAATGAAAATAATTTTAAAAAGGATATTGGATAGCTAC
 CAAATCCTTGGGATGTTTGGAAACCCAACTGGGAAGGTACCTTGTTAAAAACAATGACC

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AAATCACACCATGGAAC TGGTCCCGAGGAAGCCACTGCTGTGTCTGCCCCGGGCATATAC
AGGGCGGTGGCCCCCTGGATGCTGCTGCAAGAACCATCCTTGTGACTGCTCCTGGAGTGGG

122606 CTGTTCTTGGAGCCCAGAATTCAGGCCTGTTCCAGGGTGTCCAATTGAGCTGTGTCTCTT
GACCTGCCTCGAGGCAGCTGAAGCCAGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGG
CAGGCAGCTTAGCTCAAAATGAGAGAACTATGGCTAATTTAAACAAAAATGAAAATAAT
TTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGGTTGAAACCCAAACTGGGA
AGGTACCTTGTAAAAACAATGACCAAATCACACCATGGAAC TGGTCCCGAGGAAGCCA
[C, T]
TGCTGTGTCTGCCCCGGGCATATACAGGGCGGTGGCCCCCTGGATGCTGCTGCAAGAACCAT
CCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCCTGGAATGGC
TTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTGCCAC
CCCACCTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGCAAGG
TTACCTTCCATGCCCCACCCCACTCAGGGTTCCAGTCCCTCACCTCTGTCTGGAGGACCT

122767 AAACAAAAATGAAAATAATTTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGG
TTGGAAACCCAACTGGGAAGGTACCTTGTTAAAAACAATGACCAAATCACACCATGGAA
CTGGTCCCGAGGAAGCCACTGCTGTGTCTGCCCCGGGCATATACAGGGCGGTGGCCCCCTG
GATGCTGCTGCAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGT
ACCACCATCCCTGGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATA
[T, C]
GTCTGCTCCTGCCTGCCACCCCACTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCC
ATCTTGATCAAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCCAGTCCCTC
ACCTCTGTCTCGGAGGACCTAGGAGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGT
GGTGAATCACCAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGAC
GTTTGTCTTCCCACACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTC

122957 CAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCC
CTGGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCC
TGCTTGCCACCCCACTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCCATCTTGATC
AAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCCAGTCCCTCACCTCTGT
CGGAGGACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCA
[C, A]
CAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTTGCTTC
CCACCACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACT
TTTGCTCCAGGCTGAGTGGCCATTCCGCCTTCTCTGTCTGTGTTCTTAACCCGGTCTT
GCCTACTGTCTGGAAGAGGAGAAAGTGGTTCTGTAAAGTCTGCCTCTGAGAATCTCCACAC
CTCTTTTCAGAATGGTCTGGGGAGTGGCGGGTGCCAGTGAGACGAAAGAGGAGGACGGAG

122963 CCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCCTGGAA
TGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTG
CCACCCCACTCCCATGGAAGCTCCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGC
AAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCCAGTCCCTCACCTCTGTCTGGAGG
ACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCACCAGCA
[G, A]
AAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTTGCTTCCCACCA
CCCCCCCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACTTTTGCT
CCAGGCTGAGTGGCCATTCCGCCTTCTCTGTCTGTGTTCTTAACCCGGTCTTGCTAC
TGTCTGGAAGAGGAGAAAGTGGTTCTGTAAAGTCTGCCTCTGAGAATCTCCACACCTCTT
TCAGAATGGTCTGGGGAGTGGCGGGTGCCAGTGAGACGAAAGAGGAGGACGGAGGACAGA

124458 CTTTTTTGAGACGTAGTCTCACTCTGTTGCCAGGATGGAGTGAGTTACATGATCTCGG
CTCACTGCAAGCTCTGCCTCCCGGGTTCAAGCGATTCCCCTGCCTCAGCTCCCAAGTAG
CTGGGATTACAGGTACCTGCCACCACACCTGGCTGATTTTTGTGTTTTAGTAGAGACAG
GGTTTACCATATTGGCCAGGCTGGTCTCGAATCCTGACCTCAAGTGATCCACCTACCT
CTCGGCCCTCCCAAAGTGTGGGATTACAGGCGTGAGCCACTGTGCCTGGCCCCAGTGTAGT
[C, G]
CTTCTAAGCAAATCCATTCTAATCAAATGAAGGAACAGTGCTCCTCTTTAATAATCATAA
ATAAGTGATAGATGAATAAGGAAATGAATCATGTATGCATTTATTTGTCCACAACACACA
ATTGAGCTGGCATTTCTTGGAGGCATTTGTATAAACTTAGATGAGATCACGTCCCCTA
GGATGTCAAGGTACTTGGCCCTGATTCTGCCATGAGGCCTCCAATGGAACTTTGTCAAGGA
GTAGAAAACAGCCAATGTATGTGAAGTCCAAGTTCATTGGCACCTCCCTAGCCTCCTTGC

125449 AGCTTGAAAAATATGCTAAAGGAATTTTCTCATTGTAGGTGTTCTGTCCAGTTCCCTT
AGTGCAGGCCTTCCCAGTGTAGGGTTATTTCTGCATGACTTTCTATAAAGCTGTATTTCT
CTTCTTATCTAACTTCTCGTTCTTAGTCTAACTAGAAAGTTCATGCATATCCCTTTCTCC
CTTCTCTCCATTTTCTTTTATCTCTGAAACAATTAGGTACACACGTAGCTGGGAAGCCT
TCTTGATGCCTCCAGAAAAATCTAGATCCCTCAAACATTGTTCTATCTCTTCTTTCT
[G, A]
TACCCCAATTTTTTCTCAATTATGCTCTTAAATTATCCTTCTGAAAGATTTTCTAATTT
TGTTTGCTTCTTGTTGCCTTTTTCTCTTAGTTACACACCTTTCTCTGTAAGATTTCT
TAATGCTTATTTTATTATTATTATAGTTTATGTGGACAAGCATCCCTAGATGCTTACA
TTAAAAGTATTTGTCTAAAAAAGAAGGAAGGAAGGAAGGAAGAAAGAAAGGAAGGAAG
AAAGAAAGAGAGATAAATATGGAAGAAAGAGAAAAAAGGAAGAAAGGAAGAAAGAAAG

126753 AACATGTCTTCCCTCCGGGTGAACATTCACAAGCTAAAGAAGGGAACCTCACCTTCCCTTG
AGGAGAGCTTGCTGAACACCAGAGGATTTACCTCTTCCCCCTTCATAATGGAATAATC
ACTGAGCTTTCTGCTAGAATAAAAAAATCATGGGCCGGGCACGGTGGCTCACGCCTGTAA
TCCCAGCACTTTGGCAGACCGAGGCGGGTGGATCACTTGAGGTCAGGAGTTCAAGACCAG
CATGGCCAACATGGCGAAACCCCATCTCTACTAAAAATACAATCATTAGCTGGGCGTGGC
[G, A]
GTGCGCTCCTGTAATCTCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGG
GAGGCGGAAGTTGCAGTGAGCTGAGTTTGCGCCACTGCACTCCAGCTGGGCGACAAAGT
GAGACTCTGCCTCAAAAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAA
TAAATAAAATAAAATAAAATAAGACAAAGGAGATGATAAATTAAAGCCTAACATTACTA
TATTCCTTTTATACTGAAGAATATGGTTTATATCTGTGGAAGATGAGTTTCTTAATACA

126957 CGGGTGGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCA
TCTCTACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCGCTCCTGTAATCTCAGCTA
CTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTG
AGTTTGCGCCACTGCACTCCAGCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAAATAA
AATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAA
[-, T, G]
ACAAAGGAGATGATAAATTAAAGCCTAACATTACTATATTCCCTTTTATACTGAAGAATAT
GGTTTATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCA
CAAGGGGTAACCTCCCAAAGGAAGGGGAGAGGAAGGGGCTGGGTAAACAGTTCTGGGT
AGAAATAAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAAG
CACTGGGGCGGAAATGAGCATTTATCCTATTAGAATGGTCTTGTGCCTTCACTCCCTGT

126962 GGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCATCTCT
ACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCGCTCCTGTAATCTCAGCTACTCGG
GAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTGAGTTT
GCGCCACTGCACTCCAGCCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAAATAAAATAA
AATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAGACAA
[A, -]
GGAGATGATAAATTAAAGCCTAACATTACTATATTCCCTTTTATACTGAAGAATATGGTTT
ATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCACAAGG
GGTAACTCCCAAAGGAAGGGGAGAGGAAGGGGCTGGGTAAACAGTTCTGGGTGAGAT
AAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAAGCACTG
GGGCGGAAATGAGCATTTATCCTATTAGAATGGTCTTGTGCCTTCACTCCCTGTGCACT

128567 TTAGTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT
GCAACCTCTGCCTCCCGGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG
ATTACAGACATCTGCCACCATGCCAGCTAATTTTGTATTTTTTAGTAGAGTTGGGGTT
TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCTGACCTCAGCTCCTGAAGAGCTGGGAT
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTTATTATTTGTGAATTTTATTTTTTT
[T, -, C]
CATCCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAGTACTGAACTGGCCAGTCTGT
CATAGGTGTCTTGCACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTTCTGTGTG
TGTATATATGATCCATTTGTGTATTCGGCTTTTGTAGTGGGACTTTTTTCAGTAGGCTTCTT
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTCTGCCATGGAGATT

128567 TTAGTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT
GCAACCTCTGCCTCCCGGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG
ATTACAGACATCTGCCACCATGCCAGCTAATTTTGTATTTTTTAGTAGAGTTGGGGTT

FIGURE 3, page 101 of 107

TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCCTGACCTCAGCCTCCTGAAGAGCTGGGAT
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTATTATTTGTGAATTTTATTTTTTT
[T, -, C]

CATCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAGTACTGAACTGGCCAGTCTGT
CATAGGTGTCTTGAACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTTCTGTGTG
TGTATATATGATCCATTTGTGTATTCGGCTTTTGAGTGGGACTTTTTCAGTAGGCTTCTT
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTCTGCCATGGAGATT

128599 GAGTGCAGTGGTGCAATCTTGGCTCGCTGCAACCTCTGCCTCCCGGGTTCAAGTGATTCT
CCCTGCCTCAGTCTCCTAAGTAGCTGGGATTACAGACATCTGCCACCATGCCAGCTAAT
TTTTGTATTTTTTAGTAGAGTTGGGGTTTCCCATGTTGGCCAGGCAGGTCTTGAACCTC
TGACCTCAGCCTCCTGAAGAGCTGGGATTACAGGTGTGAGCCAGCATGCCTGGCCTGAGT
TTTTATTATTTGTGAATTTTATTTTTTTCCATCCAGATGCACCTATATTGGTAGTCTAG
[T, G]

GATAAAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAAC
CAGCAAAGTACTGAACTGGCCAGTCTGTATAGGTGTCTTGCAACATGACTCAGAGTCAG
AAGCTGGATATAAACTTTTTTCTGTGTGTATATATGATCCATTTGTGTATTCGGCTTT
TGAGTGGGACTTTTTCAGTAGGCTTCTTGAAGGTTCCACTTCACTATTCTCACTGATGTG
TGCTTACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTTTAAAAGCTCTACTCAT

128843 ATTATTTGTGAATTTTATTTTTTTTCCATCCAGATGCACCTATATTGGTAGTCTAGTGT
AAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAACCAG
CAAAGTACTGAACTGGCCAGTCTGTATAGGTGTCTTGCAACATGACTCAGAGTCAGAAG
CTGGATATAAACTTTTTTCTGTGTGTATATATGATCCATTTGTGTATTCGGCTTTTGA
GTGGGACTTTTTCAGTAGGCTTCTTGAAGGTTCCACTTCACTATTCTCACTGATGTGTG
[G, A, T]

TACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTTTAAAAGCTCTACTCATAGTT
TATAGAATTGCTAGTGCCACAAGGCCATTCAATTGTGGATGATGAAATTATTAGTTATAAG
TGAACCTTCTAAAAATAAATCTTGAAGAAAAACATGTTATAAGAAAATGAAGTCAGTCCTC
TTACTAGGCAGTTCACATCTTTCCATTTTGAGAAAATATCCTCAGTTCAGATGTATT
ACTATGGTGATGTGTTTGCATTTCAACAAACCAACCAAGCCGTAAACTGAGCTCTGCAT

130388 CGGAAGGATGATGAAAAATGGGACGGGGAGGTGGCTGAGCCTGGGGTTTTGGAAGTAGGA
TGGAATTAAATGGAAGGCAAATAAAAAAGCTTCCAAGATTGTGAGCTGCGACTGTCTGAG
AGCTCAAACCAGAGTTGGCAAGAGGAACCAAGGAGAATGAGGACATTTTTTGTCAATTGA
CAATGAGGTATACAATATATCCAGGAAAGGACAACCAGCAGCGACCTCCTGAAGCTAAAC
AGAGATTATCTTAAGCCACATATGAGGGAACATTCCTCAATGGCAAAGAGAAGCATTAAAC
[T, C]

CTGGGACTGTCTACGTCTAAGGAAAAATTTGAGCATTTACATTAATAATGGCCTGTAAACA
AGCATTGAATATTAACCAGGCACTGTGCTAAGTGTGTCACACTTGTAAATCTTCCAAA
CAATCCGATGAGGTGGGATTTCTATCTCCATTTTATAGAGGAAAAAACTAATGCACAG
AGAGGTTGAGAACTTGCCAAAGGTCACTCAGCTATTTAGCAGTGGGGTTGGGATGTGTC
TCAGGCAGTCTTCCCTAGACTCTGTGCTCTTAAACACTACTATGGTTTTTTCAGCAGCAG

131191 CTTTTATAGCAAAGTATGGGTATACACATATTTTCATACACCTACACACACATACACAT
GCAAGACGCGCATTTCTTAAGTCCCTAAAAATACCTGATAATTAATGCTCCAAACATTC
TCTGAGTGTGACCCTTGGATGTCTAGGAGAAGCAGCCAGGAACACACTTGTTAGCCGGG
GCAATGAGTAGTGGTGAATGTTTACCTTGCTGATAAAGTCTCCAGTAGATGATGCAATT
AAGATGCCACGATCTAGCCTTTGTTATACACCTCCTTGTCTGCCGTCAAACAAATCCACC
[G, C]

CTGTCCTTCCCATCTTCCCTCCTGCCATCTCCTGAAGTCCAGGAACGTCTCCAGCTTC
CTACGTACTTGACAGTCTCTTTTGCCAACCTCAACCTCATTTAGATTGCAATTACATTCA
CATCTTAATTTATGACTTAACAAGCATCTCACAAACATTTAATCACTTTAACTTCACTA
TGCATTTGAGGAGGAATATTTGAGGAGGAATGGTACTCCCATTGCCAGCAATTAGATTGA
CTTAATGATCTATGGCGAAATCTCCTTTTGGGCTTTGAACTTTTCATACATTTCTGCAAA

132702 TCAGCTTAGAGTTTTTCAGCTTAGAGTCAATTCCAGTGTGCGCTTCAGCACATCCAAAGA
GAATATGACCGATGCTACAGTCTGCTCCTGGACTCCACTGGTATGATTCTTTGCCCC
AGTATCAGTCTAATTTCCCATTTCTAGATGCTTTTTTCTTAATGACCCAACTGACTCCT
TCAGGAGCTGGCATGAGATGAGATTTGTTTGCAGAGATGTATAAAAAATTTCAAAGCCCCA
AAGGAGATTTACCACAGATCATTAAGTCCATCTAATTGTGCTCTACTACCCATTTAGA
[C, T]

FIGURE 3, page 102 of 107

GGGGACCTGTTATGCTAACTCCTATCCTGTCTCTGTGAGTGATACAGTCAACACACAT
GATGATCACAGCACCAGCTCAGACAGGTGTGTTTTAAACAAAAGTGTGTTATAAATGTA
CAGCCTCAGCAGGGAATGTGGGGCGAAGAAACACACAAATACTTGGCTAGAGTCGGT
CACAGGTGAAGATGGGGATGACTGTGTTTTCCGTTTCATCCAAACATTTTGGCCTGACTC
AGATAATTTTTTTTCCAGCATATTCTGTTTGACACAAGGGAAACGGTGCAAATCCATCAC

133422 GCATTTGGGCTGCAGTCATGGAACCATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGA
TTTTTTTGTGTTTGTGACCTGGTGTCCACGAACAGGCTTCAGGGAGCCTGAGAACCCTCT
AGACCACTTGAATAATCTGAATGCACTTTCTAGGAAAGAGTTCACAGCGTTCATCAA
TTCCCTCCAAGCAGCCAATGACCAGAGAAAGGTTAAAAGTCACTGACACAGTACCGTTTT
CTGTGCATCTATATCCTGAATCCAGGGTGATGCCGCTGACTTGCCTATCTTTCTCCTTG
[G, C]
TCTTCTAGAAAAAGCAAGTGAGTCAGACCAAGATCCGGGTCACTCAACCATCCTGTTC
ATCTTGGCCGGCTGCATTGTGTTTGTGACGATCCCTGCTGTCATCTTAAAGTACATCGAG
GGCTGGACGGCCTTGAGTCCATTTACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTT
GGTGATTTTGTGGCAGGTAAGCACCTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGA
AATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAGCAAATGA

133447 ATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGATTTTTTTGTTTGTGTTGACCTGGTGT
CCACGAACAGGCTTCAGGGAGCCTGAGAACCCTCTAGACCACTTGAATAATCTGAATGC
ACTTTTCTAGGAAAGAGTTCACAGCGTTCATCAAATTTCTCCAGCAGCCAATGACCAG
AGAAAGGTTAAAAGTCACTGACACAGTACCGTTTTCTGTGCATCTATATCCTGAATCCAG
GGTGATGCCGCTGACTTGCCTATCTTCTCCTTTGGTCTTCTAGAAAAAGCAAGTGAGT
[C, A]
AGACCAAGATCCGGGTCACTCAACCATCCTGTTCACTTGGCCGGCTGCATTGTGTTTG
TGACGATCCCTGCTGTCATCTTTAAGTACATCGAGGGCTGGACGGCCTTGAGTCCATTT
ACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTTGGTGATTTTGTGGCAGGTAAGCACC
CTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGAATAATCTGTTGGCTGTGCTTTTCG
CAATCGATAAAAGATGTTGCGGGAGAAGCAAATGAAGATGACTCAGTGTCACTACTGCTG

133956 CGGGAAAAATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAG
CAAATGAAGATGACTCAGTGTCACTACTGCTGTGAAGAGGCTCATTTCAAATCCCTAGTC
CTATGTAATATAAATACCATAGGTTTTTTTCTGCTATGAAAAGAAAGCCAACCTTTCTCT
TCTCAGGATGCTTATTTCCCTTATCGTCACACAAATTATGCAAGACTAAAGTGAATTTCT
CATTAAATCTTGAACCTCTGAATTGAATTAAACCTCTCTAATCCAATGATAAAGGCTGTG
[T, C]
TAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAGTGACC
TGCAGGTTTCAGCTTCTGACTCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGTCTCTGC
ACATGCCCAGATACAAAGCTGAGGACTTTGGTGACTATGGGGAGCTGAGAACTGCCCAGA
GGGAATATAAGCTCATGGATTATGCAGGAGTGTATATACAAGCAATAGCCTTCTCTGTAA
AAATAAATGTGGATGAGCTATGTTTAAAGGAAGTGAATAAATCATCAATTTTCATCTAG

134132 TCCTTCTCAGGATGCTTATTTCCCTTATCGTCACACAAATTATGCAAGACTAAAGTGAAT
TTCTCATTAAATCTTGAACCTCTGAATTGAATTAAACCTCTCTAATCCAATGATAAAGGC
TGTGTTAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAG
TGACCTGCAGGTTACGTTTCTGACTCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGT
CCTGCACATGCCCAGATACAAAGCTGAGGACTTTGGTGACTATGGGGAGCTGAGAACTGC
[C, T]
CAGAGGGAATATAAGCTCATGGATTATGCAGGAGTGTATATACAAGCAATAGCCTTCTCT
GTAAAAATAAATGTGGATGAGCTATGTTTAAAGGAAGTGAATAAATCATCAATTTTCAT
CTAGGGCCAGGGAATTGCAAATGAAATGAGATTTAGTTTCATATGTGCACCAGTTTCCC
AAAAGTGTGGTAGAAAGGTACGGATAGAAGGAAGAGGCCATCCTTCTCTTTTCTAATAG
GATAGTTCTAGATGTTTCAGACAAGTGATCAGTTTCTACTACAAGAAGTGAACACTTTGAT

136253 ACAGACCAATCTGGAGAATGCATGCCTGAAAAGACTGGAAGTTTATCTCTATCTTTTGGT
AACAGTCTGCGAGTGATAGGGAAGGTTGCCCAATCATTGGAAAACGATACATTAAACAAGA
GTTGATGGTTGCTGTGATTGACATAGTATGAACCTACTAGAAATGTAATCAGATCATT
GATCCTGCAGGATTGATTGCTGATTTATTTGACGCTGACTCACTTTAGGACAGCCTTAC
AATATTTGCAACTCTGTCTGGGAGCACACAGAACTCCGAATCCAGATAAGCAGCTCA
[A, T]
AAAGGGTACTTAGAAGGGTGTGACTGCCTGCTTCATTGTTTCTTCTACTAGCGCAC
CCTAGTGACCATCTTTGCTGGGTAATAGTGACTTGCAAAGGTAAATATTTACTCCAGAT
AGCCACAGGAGAAAGCTACAGATTTCTCTGGCGTAGCACAGAAACGAAATGAACCTCAA

FIGURE 3, page 103 of 107

AAACCACTTACTGGTGC GGGAACCTCAGATCGTATCCTACAGCTCTAATGATGCAGGAGAG
AGTTGTCTGAAAGGAAAAACCAAAAGCAGCTGCACCAACCGAAGGGGGCTTGGCACAGA

137206 GGGCTTGCACCTGTTTTGCATGGCTGCCTCCAGCAGTGTCTGTAGGAAGTTAGAATAA
ATAGGCTAATTATTCAGAATAAATGACTGGTCCTTCAATGGAACAGCCAGTCAATGCAA
TCAGGCAACTGGCCAATTTGGTTTGATGGATTTTTACTGTAATCCTTATTTATAAAATAA
AGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCC
TAACTGACCCCTTTGGAGTAGCACTATGTAAACACCATTCTCAGTTAGCATTAATCACT
[G, T, A]
TTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACTTTACACATCCACT
TGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATTCCAAACCAT
AGGGGGTGGTATGATTATATTTGATTTTTATTAAATAAATTTAGAGAAGTTTAAGAAAA
ACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGTTTATTCATCCTTAACGC
TCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTTCTGGTATTAAGG

137313 CCAGTCAATGCAATCAGGCAACTGGCCAATTTGGTTTGATGGATTTTTACTGTAATCCTT
ATTTATAAAATAAAGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTC
TAATTACTCAGCCTAAGTACCCCTTTGGAGTAGCACTATGTAAACACCATTCTCAGTTA
GCATTAATCACTATTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACT
TTCACATCCACTTGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAA
[C, A, G]
AATTCCAAACCATAGGGGGTGGTATGATTATATTTGATTTTTATTAAATAAATTTAGAG
AAGTTTAAGAAAAACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGTTTAT
TCATCCTTAACGCTCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATT
TCTGGTATTAAGGTTAGTGGTCAAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTT
TGGGTAAGGGATGGGTACCCCCCTTGCCCTCTAACCCGGTCCACCTTGTACACAGCAA

137335 TGGCCAATTTGGTTTGATGGATTTTTACTGTAATCCTTATTTATAAAATAAAGGGATTGG
CCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCCTAAGTACCC
CTTTGGAGTAGCACTATGTAAACACCATTCTCAGTTAGCATTAAATCACTATTGCTTGC
ATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACTTTACACATCCACTTGTCTCTT
AGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATTCCAAACCATAGGGGGTG
[G, A]
TATGATTATATTTGATTTTTATTAAATAAATTTAGAGAAGTTTAAGAAAAACAATGAC
AACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGTTTATTCATCCTTAACGCTCAGGTCAA
GCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTTCTGGTATTAAGGTTAGTGGTC
AAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTTTGGGTAAGGGATGGGTACCCCC
CTTGCCCTCTAACCCCGGTCCACCTTGTACACAGCAAACCTAACAGCTGAGTGTAAACA

137951 TTCACTACATGGAATGGAATATGTGTCTCTGCAAAGACCATATGCTAGATCATGGTTAA
AGTAACATTTGGTTGTTTTAGGGGGGAAACGCTGGCATCAATTATCGGGAGTGGTATAAG
CCCCTAGTGTGGTTTTGGATCCTTGTGGCCTTGCCACTTTGCAGCTGTCTCAGTATG
ATCGGAGATTGGCTACGGGTTCTGTCCAAAAGACAAAAGAAGAGGTAGGACCCCTTCT
AACCCTATGAATGTTCTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCC
[T, C]
GTGGGCTGGAGTGTCTTCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTT
CCTCATGTTGAATCAGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCT
TTTTTTTGGCAGGTGAGAAAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAAA
CTAGTAAACAACAGCTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACT
ATGGCTGAGTGTGTGTGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAG

138206 CCTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGT
TTCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATC
AGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTTGGCAGGT
GAGAAAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAG
CTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGT
[G, C]
TGTGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACG
CCAAGAATCTTTCTGATTGAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGG
GAAGTGAGCCCAATGGGCCTCTTTCATTTATCCCTCTTGGTTGTACATCCATAGAGAC
AAATATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAA
GACATATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTCATGTAGCTCTCTTA

138207 CTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGTT
TCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCA
GTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTGGCAGGTG
AGAAAATATGGTGATTTCGTTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGC
TGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTG
[T, G]
GTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGC
CAAGAATCTTTCCTGATTAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGGG
AAGTGAGCCCAATGGGCCTCTTCACTTATCCCCTCTTGGTTGTACATCCATAGAGACA
AATATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAG
ACATATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTTCATGTAGCTCTCTTAG

138210 AGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGTTTCT
GGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCAGTC
CTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTGGCAGGTGAGA
AAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGCTGA
TTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTGTG
[-, G]
GGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGCCAA
GAATCTTTCCTGATTAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGGGAAG
TGAGCCCAATGGGCCTCTTCACTTATCCCCTCTTGGTTGTACATCCATAGAGACAAAT
ATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAGACA
TATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTTCATGTAGCTCTCTTAGGAA

138805 TAGGAAGAGAGGAAAAAGAAAGGAGGAAGGCCAAGGAAGGAGAAAAAAGAGCTAAAAGA
AAGGAAGGGAGATAAGAAAAACCAAGAAATAGAGGGCCAGCCTCTGTTTGCTTCATTCT
GTATAAAAGGCCCCAGGAGAAAGTTGCTGAATGGAGAGATTTCCACATCAGTTTCCTGG
GCCCATATGCTAATTTTCTGGTTTATATAAGTAAGCCAGGAAAGTAAAGCAATGCAATTT
CCAGACCGGTTCCCCAGACAGCTAACTGACCTGCTGAAAATCAGCTATAACAAAAGAGAA
[G, C]
GGAACAACATGAATATTGACTTTCCTGGATGCACAAATTTGAGTTCCTCATTGTCAGAGG
GAAGCATGGGACTTATACTGTCTGCCCTGTTTATTAAGAGCCAAGAAATTTGGTGCTGAT
CCTCAGGCAAACTCCACTCTAAGGAGGCCTGTTCTGTGGGCTTTGGCAGAATAGGCCGT
CTTCTGCAACCCTGACTGGGGGAAGTGGGTTACCAGGTGCCCTGGAGCATCTTCTTAAAC
CAGGGAAAGCCCCACAGCACATGACCATAGCATGGCCAGATAGGGTGGCCACCCATCCC

140339 ACCTCCAGACTCACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT
CAGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAG
ACGGAAGAGATGTGTAACCTCAGACAACCTCCAGCACAGCCATGCTGACGGAAGTATCCAG
CAGCACGCTGAGTTGGAGAACGGAATGATACCCACGGACACCAAAGACCGGGAGCCGGAG
AAACAATCATTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGAAGTACGCG
[-, T]
TGT
CTTTTGTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAAGT
AAAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCA
GGACACACCAAGAGTGTCCGTGCACGTAGCCGTTCTGGCCGTACATGTTAAGGGCATTT
CAGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGC

140340 CCTCCAGACTCACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT
AGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGA
CGGAAAAGATGTGTAACCTCAGACAACCTCCAGCACAGCCATGCTGACGGAAGTATCCAGC
AGCACGCTGAGTTGGAGAACGGAATGATACCCACGGACACCAAAGACCGGGAGCCGGAGA
ACAATCATTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGAAGTACGCGT
[-, G, T]
GT
TTTTTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAAGT
AAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCA
GACACACCAAGAGTGTCCGTGCACGTAGCCGTTCTGGCCGTACATGTTAAGGGCATTT
AGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGT

140360 AAAAAAAGGACCTCAAAAAGACCTTGCCCGAGGACGTTTCAAAAATCTACAAGACCTTC
CGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGACGGAAGAGATGTGTAACCA
GACAACTCCAGCACAGCCATGCTGACGGAAGTATCCAGCAGCACGCTGAGTTGGAGAAG

FIGURE 3, page 105 of 107

GGAATGATACCCACGGACACCAAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGAC
AGAAACTAAATGTGAAGGACATTGGTCTTGACTGAGCGTTGTGTGTGTGTGTGTGTGTG
[- , T]

GTTTTTAATATTCACTGAGACATGTGCCTTAAACAGACTTTTTAGTCCAAAATTACAT
AGCATTGAAGAATATATTTCACTGTGCCATAAACAACTGAAAGCTTGCTCTGCCAAAAGG
AATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGT
GCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGCTGTACCCCT
GGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCT

140366 AAGGACCTCAAAAAGACCTTGCCCGAGGACGTTTCAAAAATCTACAAGACCTTCCGGAAT
TACTCCCTGGACGAGGAGAAGAAAGAGGAGAGACGAAAAGATGTGTAAGTCAAGACAAC
TCCAGCACAGCCATGCTGACGGACTGTATCCAGCAGCAGCTGAGTTGGAGAACGGAATG
ATACCCACGGACACCAAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGACAGAAAC
TAAATGTGAAGGACATTGGTCTTGACTGAGCGTTGTGTGTGTGTGTGTGTGTGTGT
[T, -]
AATATTCACACTGAGACATGTGCCTTAAACAGACTTTTTAGTCCAAAATTACATAGCATT
GAAGAATATATTTCACTGTGCCATAAACAACTGAAAGCTTGCTCTGCCAAAAGGAATCAG
AGAACAAGAATTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGTGCACGT
AGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGCTGTACCCCTGGGCAG
TGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCTGAAAGA

141183 TTGGAAGCAGATCAGAGCACACGTACGAAAAGGTGCAATTGCTTTTTCTCATGACAAAAGA
AAAAAATAATCACAACACATCAGCTGTGGATATCACCTTAACCAATGACAGAAGCCT
GCTGAGTTTGGTCTTTCTCACAGGGTAGGTAGTCCACATGAAGTGGCGAGCAGTGGTGA
AAACATGACATCAACTGCTGCGTGGTTAAAGGCCAATCATGCATTTTCTCAGTGGGTGC
AATGGTGACAATAAACTGATTTGGAATGTCCATGTACTTTGGTTATAACTTGTTTTGAT
[A, G]
AGAGGGGTAGAAATACCAAAACAATTGCCTTGCATGATGCCAGTGGCTTGCTGTTCTGTG
TAGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAG
GACCATGGCATCTTCCATCTCAGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATA
GTGATAAGATCCAATCTCGCTATCTCAAACAAAAAGAAAATGTACCCCTTGACAGTAA
GCTTGAAATGTTTTATTGCTTGACGCGTAAGTGCCATTAATTCCATTTAACAATGATAC

141545 AGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAGG
ACCATGGCATCTTCCATCTCAGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATAG
TGATAAGATCCAATCTCGCTATCTCAAACAAAAAGAAAATGTACCCCTTGACAGTAA
CTTGAAATGTTTTATTGCTTGACGCGTAAGTGCCATTAATTCCATTTAACAATGATACT
TAGAAATATTTAAATATTTTACTTTTATGTTTGGGCATTCCTTTATTCTGAAAA
[A, T]
GTCACCACTGCTCCTTGCTTGTCTTACATCTCACATCGGTTACTCAAAAACCTGGAAC
ACCCTAGACTGATTGTTCCAGGCAAACGATAAGCTAACACATCATAATTATGATTGGTC
TGTGAGGCTAGAACATCCCGCAGAGGAAAGTCCGGGAATGGCTAGTCATAGGTTGCATGA
TGATTTTAAATGGGTTTGTATCAGAAAGGGGAAAATACATCTCCTGTGTATGCCTCAT
CTTTATCATAATTGGCTGGTTACAGCTAGCTCTTGGGCCACACGTGAAAGCATTTGGA

142316 TTGTACCCACGACATCCTCAACCACTGGTACCATGGAAGACCTGTCCCTGCCCATTTCTC
AAAAATGCACAGCTCTCCCTGCCTGGAGCACATGAAGTCCCATCTCCCTGTCCCCAGAC
CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTCCTGTCCAAGGAAGGTC
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTCGACTC
AGTAATAAATAGTCATTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA
[C, T]
GGGAATCATTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTCC
TCTGTTATTCTAACAGTCAAGCTTCCTAATTAACTGTCCATGGATCTCACTTATTG
GTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAATTCAGGCCCT
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTGCCTTCTGTGGGCCAGGCA
CAGGATTAGGCATTTATGAACGTCAGCTCATTGAACTTCACGACACTATGTGGGAAGT

142436 CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTCCTGTCCAAGGAAGGTC
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTCGACTC
AGTAATAAATAGTCATTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA
TGGGAATCATTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTC
CTCTGTTATTCTAACAGTCAAGCTTCCTAATTAACTGTCCATGGATCTCACTTATT
[T, C, G]

FIGURE 3, page 106 of 107

GTTTCCACTCTGTGTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAAATTCCAGGCCCT
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTGCCTTCTGTGGGCCAGGCA
CAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCACGACACTATGTGGGAAGT
ATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATC
CAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAGCTGACCAAAGCTGCTT

142719 ATGGATCTCACTTATTTGGTTTCCACTCTGTGTATCTGGTACGTTCTTTGTAGCAGTGT
GTTAAAATTCCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG
CCTTCTGTGGGCCAGGCACAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCA
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG
[G, T]
CTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTATGCATCCTTGTGATTGT
GTGTGTTTGTGTGTATGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGA
GCAGATATGGTGGAAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC
AAAGGGTTGCCCCCTGCAGACACCTACTGTACATTTATTTGGTTTTGGAAATTTGTATGT
GGCACCCCTTTAAAAAATGCCCTTTGAAAGCACTCTTTGCACCTTACTTGCTAACCTTGT

142779 GTTAAAATTCCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG
CCTTCTGTGGGCCAGGCACAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCA
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG
TCTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTATGCATCCTTGTGATTG
[T, C]
GTGTGTTTGTGTGTATGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGA
GCAGATATGGTGGAAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC
AAAGGGTTGCCCCCTGCAGACACCTACTGTACATTTATTTGGTTTTGGAAATTTGTATGT
GGCACCCCTTTAAAAAATGCCCTTTGAAAGCACTCTTTGCACCTTACTTGCTAACCTTGT
AGAAACTCTGCATACAGCAGGAATAAAATAGTTCAAAGCACTAAGCTGCATACTCTACCA

142931 TATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATCCAATGGCACACAGC
AAGAAAGTGGTAGAGCTGGTATTCAAAGCTGACCAAAGTCTGCTTTCAACTTCACTACA
GTGTCTGTGTATGCATCCTTGTGATTGTGTGTGTTTGTGTGTATGTGTCTTTCTAGC
TTCATGGACACAGCTTACAGATGTGGGGAGCAGATATGGTGGAAATCTCCACCACCAAGAG
GGCACAAGGTCTTTGTGTAAACATGGCTCAAAGGGTTGCCCCCTGCAGACACCTACTGTAC
[A, C]
TTTATTTGGTTTTTGAAATTTTGTATGTGGCACCCCTTTAAAAAATGCCCTTTGAAAGCAC
TCTTTTGCACCTTACTTGCTAACCTTTGTAGAACTCTGCATACAGCAGGAATAAAATAGT
TCAAAGCACTAAGCTGCATACTCTACCAAATGGAACAGGTGCATGTGTTGGTATGTGCAT
AGATGCTTCCCCAAATGAGTCAAATCAGTCACACAGAGGGATCAAACATAACCTTGGGCT
GGGGGTGGGAAAATTTTCTACATAACCCATTCCCTGAGACATTTGGCCAAGAATGTGATG